AMENDMENT OF SOLICITATION/MODIFICATION OF CON	TRACT 1.	CON	TRACT ID CODE	PAGE 1 OF 2	
2. AMENDMENT/MODIFICATION NO. 3. EFFECTIVE DATE See Block 16C	4. REQUISITION/P 21483745	URCI	HASE REQ. NO. 5. PROJEC	T NO. (If applicable)	
G. ISSUED BY GSA/FEDSIM Acquisition (QF0BCA) 1800 F Street, NW, 3100 Washington, DC 20405 Contract Specialist Name: Jane B Facchina Contract Specialist Phone: 202-680-0276	7. ADMINISTERED) BY (I	If other than item 6) CODE		
 NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and ZIP Coo SRA INTERNATIONAL, INC. 4300 FAIR LAKES CT FAIRFAX, VA, 220334232 	de)	(X)	9A. AMENDMENT OF SOLIC 9B. DATED (SEE ITEM 11)	ITATION NO.	
Phone: (703) 803-1500 Fax: (703) 803-1509		х	10A. MODIFICATION OF CO GS00Q09BGD0055 / G 10B. DATED (SEE ITEM 13) 12/13/2013		
CODE FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO A The above numbered solicitation is amended as set forth in Item 14. The hour and date specifi		F SC	DLICITATIONS is extended,	is not extended.	
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solici (a) By completing items 8 and 15, and returning copies of the amendment; (b) By acknowle- which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKN OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUF change may be made by telegram or letter provided each telegram or letter makes reference to the 12. ACCOUNTING AND APPROPRIATION DATA (If required) 285F.Q00FB000.AA10.25.AF151.H08 Total Amount of MOD: \$0.00 13. THIS ITEM ONLY APPLIES TO MOD IT MODIFIES THE CONTRACT/ORD	dge receipt of this amen OWLEDGEMENT TO B 8 OFFER. If by virtue of solicitation and this ame	idment E REC this ar endme	on each of the offer submitted; or (CEIVED AT THE PLACE DESIGNAT mendment your desire to change an nt, and is received prior to the openi	offer already submitted, such	
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority NO. IN ITEM 10A.	,				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REF appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE A	UTHORITY OF FAR	43.10		nges in paying office,	
X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT			t		
D. OTHER (Specify type of modification and authority)	s - Cost-Reimbur	seme	ent		
E. IMPORTANT: Contractor is not, is required to sign this documen	t and return c	onies	to the issuing office.		
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) See SF30 Continuation Page					
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as	s heretofore changed, re	emains	unchanged and in full force and eff	fect.	
15A. NAME AND TITLE OF SIGNER (Type or print) Tracy Archer, Sr. Contracts Administrator		ITLE	OF CONTRACTING OFFICER		
(b) (6) 15C. DATE SIGNED	(b) (6)			16C. DATE SIGNED	
03/15/18				15 Mar 2018	

PAGES

			Line I	tem Summary			
ITEM NO.	SUPPLIES OR SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	Rev. Ext. Price	Prev. Ext. Price	Amount Of Change
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
0001	Prime Contractor Labor - All Task Areas	1.0	lot	(b) (4)			
0002	Subcontract Labor Costs - All Task Areas ()	1.0	lot				
0003	Travel (\$10,000.00)	1.0	lot				
0004	Tools (\$8,860,000.00)	1.0	lot				
0005	Contract Access Fee (\$100,000.00)	1.0	lot	-			
1001	Prime Contractor Labor - All Task Areas () Subcontract Labor Costs - All Task Areas	1.0	lot	-			
1004	Tools (\$ 8,860,000.00)	1.0	lot				
1005	Contract Access Fee (\$100,000.00)	1.0	lot	-			
2001	Prime Contractor Labor - All Task Areas (1.0	lot				
2004	Tools (\$ 8,860,000.00)	1.0	lot				
2005	Contract Access Fee (\$100,000.00)	1.0	lot				
3001	Prime Contractor Labor - All Task Areas (\$ 500) Subcontractor Labor (No Fixed Fee) All Task Areas to include Indirect Handling Rate	1.0	lot	-			
3004	Tools (\$8,860,000.00)	1.0	lot				
3005	Contract Access Fee (\$100,000.00)	1.0	lot				
4001	Prime Contractor Labor - All Task Areas (\$ 500) Subcontractor Labor (No Fixed Fee) All Task Areas to include Indirect Handling Rate	1.0	Lot				
4003	Travel (\$10,000.00)	1.0	Lot				
4004	Tools (\$8,860,000.00)	1.0	Lot				
4005	Contract Access Fee (\$100,000.00)	1.0	Lot				
				TOTALS:	\$116,503,073.68	\$116,503,073.68	\$0.00

Block 14 Continued:

The purpose of this modification is to 1) Deobligate and obligate funding, 2) Remove Subtask from C.3.5.5.14, 3) Incorporate GSAM Clauses in Section I as follows:

- 1. Deobligate funding in CLIN 4004 and obligate funding in CLIN 4003 in the amount of \$4,286
 - a. CLIN 4004 is decreased by \$4,286 from (b) (4)
 - b. CLIN 4003 is increased by \$4,286 from (b) (4)
- 2. Remove Sub-task C.3.5.5.14, ARM Data Facility (ADF) Support Services in its entirety.
- 3. Section I incorporates required GSAM clauses in full text by adding Section I.3.1 and amends Section H.25.2 that contradicts the added GSAM clauses.

The conformed copy of the Task Order is attached in its entirety. All changes to the Task Order as a result of this modification are noted by a vertical line in the right margin.

All other terms and conditions remain unchanged.

SUMMARY OF COST IMPACT FROM THE ABOVE CHANGES

- The total funding obligated under this Task Order remains unchanged at \$116,503,073.68.
- The total estimated value of this Task Order remains unchanged at \$148,118,782.00

END OF MODIFICATION

TASK ORDER

GSQ0014AJ0032

IT Infrastructure and Operations

IN SUPPORT OF:

U. S. Government Accountability Office (GAO)
Information Systems and Technology Services (ISTS)

Issued to:

SRA International, Inc. 3434 Washington Blvd. Arlington, VA 22201-4508

Issued by:
General Services Administration (GSA)
The Federal Systems Integration and Management Center (FEDSIM)
GSA FEDSIM (QF)
3rd Floor, Wing 1
1800 F Street NW
Washington, DC 20405

Modification PS39 March 14, 2018

NOTE: The Section numbers in this Task Order (TO) correspond to the Section numbers in the Alliant Contract. Section B of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

B.1 GENERAL

The work shall be performed in accordance with all Sections of this TO and the contractor's Basic Contract, under which the resulting TO will be placed.

B.5 CONTRACT ACCESS FEE

The General Services Administration's (GSA) operating costs associated with the management and administration of this contract are recovered through a Contract Access Fee (CAF). The amount of the CAF is $\frac{3}{4}$ % (i.e., (.0075)) of the total price/cost of contractor performance up to a maximum of \$100,000 per TO year. The CAF shall be obligated at Task Order Award (TOA). The CAF for this effort is \$100,000 per TO year, totaling \$500,000 for the life of the TO.

B.6 ORDER TYPES

The contractor shall perform the effort required by this TO on a Cost-Plus-Fixed-Fee (CPFF) Term type basis for Contract Line Item Numbers (CLINs) 0001, 1001, 2001, 3001, and 4001; on a Not-to-Exceed (NTE) Cost Reimbursable basis for CLINs 0002, 0003, 0004, 1002, 1003,1004, 2002, 2003, 2004, 3002, 3003, 3004, 4002, 4003, and 4004; and on a NTE for the CAF for CLINs 0005, 1005, 2005, 3005, and 4005.

B.7 ORDER PRICING

Long distance travel is defined as travel over 50 miles. Local travel will not be reimbursed. The following abbreviations are used in this price schedule:

CLIN Contract Line Item Number
CPFF Cost-Plus-Fixed-Fee
NTE Not-to-Exceed

TO Task Order

IAW In Accordance With

B.7.2.1 BASE PERIOD:

LABOR CLIN

CLIN	Description	Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
0001	Prime Contractor Labor - All Task Areas	\$ (b) (4)	\$ (b) (4)	(b) (4)

CLIN	Description	Total Estimated Cost
0002	Subcontract Labor Costs - All Task Areas to include Indirect Handling Rate (b) (4)	(b) (4)

COST REIMBURSEMENT TRAVEL AND ANCILLARY PRODUCTS/SERVICES CLINS

CLIN	Description		Total Ceiling Price
0003	Long Distance Travel Including Indirect Handling (b) (4)	NTE	(b) (4)
0004	Ancillary Products/Services Including Indirect Handling (b) (4)	NTE	(b) (4)

CONTRACT ACCESS FEE

CLIN	Description		Total Ceiling Price
0005	Contract Access Fee	NTE	(b) (4)

TOTAL CEILING BASE PERIOD CLINs:



B.7.2.2 OPTION PERIOD 1:

LABOR CLIN

LITED	K CLIN			
CLIN	N Description	Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
1001	Prime Contractor Labor (All Task Areas) Subcontractor Labor ((D) (4)) (All Task Areas to include Indirect Handling Rate (b) (4)	\$ (b) (4) \$ (b) (4)	\$ (b) (4) \$	(b) (4) (b) (4) CLIN TOTAL: (b) (4)

CLIN	Description	Total Estimated Cost
1002	DELETED	\$ DELETED

COST REIMBURSEMENT TRAVEL AND ANCILLARY PRODUCTS/SERVICES CLINs

CLIN	Description		Total Ceiling Price
1003	Long Distance Travel Including Indirect Handling (b) (4)	NTE	(b) (4)
1004	Ancillary Products/Services Including Indirect Handling (b) (4)	NTE	(b) (4)

CONTRACT ACCESS FEE

001122	#1011100E001EE		
CLIN	Description		Total Ceiling Price
1005	Contract Access Fee	NTE	(b) (4)

TOTAL CEILING OPTION PERIOD 1 CLINs:

(b) (4)

B.7.2.3 OPTION PERIOD 2:

LABOR CLIN

CLIN	Description	Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
2001	Prime Contractor Labor - All Task Areas Subcontractor Labor (b) (4) (b) (4) (All Task Areas to include Indirect Handling Rate (b) (4)	\$ (b) (4) \$ (b) (4)	\$ (b) (4) \$	(b) (4) (b) (4) CLIN TOTAL: (b) (4)

CLIN	Description	Total Estimated Cost
2002	DELETED	\$ DELETED

COST REIMBURSEMENT TRAVEL AND ANCILLARY PRODUCTS/SERVICES CLINs

CLIN	Description		Total Ceiling Price
2003	Long Distance Travel Including Indirect Handling (b) (4)	NTE	(b) (4)
2004	Ancillary Products/Services Including Indirect Handling (b) (4)	NTE	(b) (4)

CONTRACT ACCESS FEE

CLIN	Description		Total Ceiling Price
2005	Contract Access Fee	NTE	(b) (4)

TOTAL CEILING OPTION PERIOD 2 CLINs:



B.7.2.4 OPTION PERIOD 3:

LABOR CLIN

CLIN	Description	Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
3001	Prime Contractor Labor - All Task Areas Subcontractor Labor (All Task Areas to include Indirect Handling Rate (b) (4)	\$ (b) (4) \$ (b) (4)	\$ (b) (4) \$!	(b) (4) (b) (4) CLIN TOTAL: (b) (4)
				CLIN TOTAL: (b) (4)

The fixed fee ceiling amount for option period 3 (OP3) associated with labor CLIN 3001 was increased through task order modification PO34 from \$ (b) (4) to \$ (b) (4) , a fixed fee ceiling increase amount of (b) (4) . This fixed fee ceiling increase occurred when the labor cost ceiling for CLIN 3001 was also increased from \$ (b) (4) to \$ (can only become an incurred cost to the Government after the original labor ceiling of \$ (b) (4) to \$ (can only become an incurred cost to the Government after the original labor ceiling was to allow for additional fixed fee to be billed against CLIN 3001 when the labor cost ceiling was increased. The Government will not begin to incur this additional fixed fee until the labor cost against CLIN 3001 exceeds the original \$ (b) (4) to \$ (b) (4) to \$ (can only become an incurred cost to the Government will not begin to incur this additional fixed fee until the labor cost against CLIN 3001 exceeds the original \$ (b) (4) to \$ (can only become an incurred cost to the Government will not begin to incur this additional fixed fee until the labor cost against CLIN 3001 exceeds the original \$ (can only become an incurred cost ceiling at which point the appropriate fee will be applied against CLIN 3001 cost incurred.

CLIN	Description	Total Estimated Cost
3002	DELETED	\$DELETED

COST REIMBURSEMENT TRAVEL AND ANCILLARY PRODUCTS/SERVICES CLINS

CL	IN	Description		Total Ceiling Price
30	03	Long Distance Travel Including Indirect Handling (b) (4)	NTE	(b) (4)
30	04	Ancillary Products/Services Including Indirect Handling (b) (4)		(b) (4)

CONTRACT ACCESS FEE

CLIN	Description		Total Ceiling Price
3005	Contract Access Fee	NTE	(b) (4)

TOTAL CEILING OPTION PERIOD 3 CLINs:

(b) (4)

B.7.2.5 OPTION PERIOD 4:

LABOR CLIN

CLIN	Description	Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
4001	Prime Contractor Labor - All Task Areas Subcontractor Labor ((All Task Areas to include Indirect	\$ (b) (4) \$ (b) (4)	\$ (b) (4) \$ [(b) (4) (b) (4) CLIN TOTAL:
	`			CLIN TOTAL: (b) (4)

CLIN	Description	Total Estimated Cost
4002	DELETED	\$DELETED

COST REIMBURSEMENT TRAVEL AND ANCILLARY PRODUCTS/SERVICES CLINs

CLIN	Description		Total Ceiling Price
4003	Long Distance Travel Including Indirect Handling (b) (4)	NTE	(b) (4)
4004	Ancillary Products/Services Including Indirect Handling (b) (4)		(b) (4)

CONTRACT ACCESS FEE

	001,11	10101100200122					
	CLIN	Description		Total Ceiling Price			
ſ	4005	Contract Access Fee	NTE	(b) (4)			

TOTAL CEILING OPTION PERIOR	D 4	4 CLIN	S
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(b)	(4)		

GRAND TOTAL OF ALL CLINs:

\$ 148,118,782.00

B.12 SECTION B TABLES

B.12.1 CLIN DESCRIPTIONS

The following sections provide a brief description of the required usage of the subject CLINs.

B.12.1.1 CLINS 0001 THROUGH 4001 - LABOR

The subject CLINs are to support all labor performed by the Prime contractor on this TO. The contractor will be reimbursed for all labor on a CPFF basis. The contractor shall propose the Fixed Fee in the Section B Schedules.

The subject CLINs are also to support all labor performed by any subcontractors that was proposed and awarded at Task Order award. The contractor will be reimbursed for all labor on a Cost Reimbursable basis.

B.12.1.2 CLINS 0002 THROUGH 4002 - LABOR

The subject CLINs are to support all labor performed by any subcontractors that was proposed and awarded at Task Order award. The contractor will be reimbursed for all labor on a Cost Reimbursable basis.

B.12.1.3 CLINS 0003 THROUGH 4003 – LONG-DISTANCE TRAVEL

The contractor's long-distance travel will be reimbursed IAW Section G.9.6.1.4 and Section H.23 of the TOR.

B.12.1.4 CLINS 0004 THROUGH 4004 – ANCILLARY PRODUCTS/SERVICES

The subject CLINs support contractor reimbursement for Government-approved purchases of tools, miscellaneous in-scope services, and hardware/software maintenance agreements in support of the TOR requirements.

B.12.1.5 CLINS 0005 THROUGH 4005 – ALLIANT CONTRACT ACCESS FEE

The contractor will be reimbursed for the Contract Access Fee IAW the Alliant Contract Access Fee memo dated June 1, 2009.

B.12.2 INDIRECT/MATERIAL HANDLING RATE

Travel Ancillary Products/Services Costs, and subcontractor labor incurred may be burdened with the contractor's indirect/material handling rate IAW the Contractor's disclosed practices. If no indirect/material handling rate is allowable IAW the Contractor's disclosed practices, no indirect/material handling rate shall be applied to or reimbursed on such costs.

B.12.3 INDIRECT RATES

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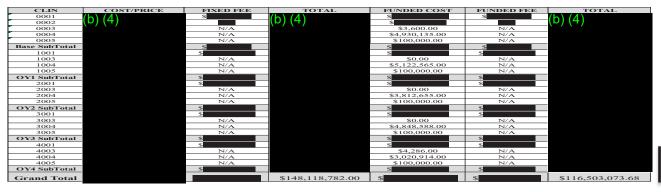
All indirect rates proposed and billed under this task order should be commensurate with any existing current DCAA approved forward pricing rate agreements. If alternate rates are proposed, and/or DCAA approved forward pricing rate agreements do not exist, supporting information to verify the appropriateness of the rates shall be provided. Indirect rates include, but may not be limited to, indirect material handling rates, overhead rates, and general and administrative rates.

B.13 INCREMENTAL FUNDING

B.13 <u>INCREMENTAL FUNDING LIMITATION OF GOVERNMENT'S</u> <u>OBLIGATION</u>

Incremental funding for Base Year CLINs 0001 through 0005, Option Period 1 CLINs 1001 through 1005, Option Period 2 CLINs 2001, 2004, and 2005, Option Period 3 CLINs 3001, 3004, and 3005, and Option Period 4 CLIN 4001, 4004, and 4005 is currently allotted and available for payment by the Government. Additional incremental funding for these CLINs will be allotted and available for payment by the Government as the funds become available. The estimated period of performance covered by the allotments for the mandatory CLINs is from award through December 5, 2019. The TO will be modified to add funds incrementally up to the maximum of \$87,221,665 over the performance period of this TO. These allotments constitute the estimated cost for the purpose of Federal Acquisition Regulation (FAR) Clause 52.232-22, Limitation of Funds, which applies to this TO on a CLIN-by-CLIN basis.





*Note: Modification PO15 combined prime and subcontractor labor CLINs (CLINs 1001/1002, 2001/2002, 3001/3002, 4001/4002). Therefore, the Incremental Funding Chart above shows only one labor CLIN for OY1-OY4. It is understood by all parties that the fixed fee remains unchanged for the prime labor under each year (of original estimated prime labor cost as shown in Sections B.7.2.2 – B.7.2.5) and that the subcontractor handling fee remains unchanged under each year (of of OY1 and of of OY2-4) as a result of modification PO15. Further it is understood that the table above will proportionally fund "Funded Cost" and "Funded Fee" until the maximum NTE dollar amount is reached for "Funded Fee" (See Sections B.7.2.2 – B.7.2.5), at which point remaining funds will be added in their entirety only to "Funded Cost" under the CLIN. Although the contractor will be allowed to utilize the total of the stated Estimated Costs (both Prime and Subcontractor) for either Prime or Subcontractor labor as deemed necessary for each Year, in no event will the total fixed fee paid exceed the awarded Fixed Fee dollar amount established under each CLIN period.

NOTE: Section C of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

C.1 BACKGROUND

Within the Office of the Chief Administrative Office, GAO has a primary office that supports the information and knowledge management functions of the agency: Information Systems and Technology Services (ISTS). ISTS provides and maintains the IT infrastructure, applications and systems that are employed by the agency and also provides the publications support and distribution services required by the agency.

ISTS is a customer-focused team of about 100 Government employees who provide quality information technology services that enhance the mission success of the GAO environment. ISTS recognizes the importance of customer satisfaction and is committed to outstanding customer service and outreach throughout the GAO enterprise. See **Section J**, **Attachments N** and **N.1** for the GAO Customer Satisfaction Survey and the 2013 results.

GAO currently employs approximately 2,900 staff across the agency. Of these staff, approximately 75% are located at GAO headquarters while the remaining 25% are located at 11 Field Offices (FOs) across the continental United States. There are also approximately 300 contractor personnel (multiple contractors) at Headquarters. In a standard fiscal year, approximately 400 staff depart and 400 are hired each year; another 500 are relocated within their FO or within Headquarters. In the current budget environment, however, GAO has experienced limited hiring; in FY 2012, GAO hired approximately 135 staff while approximately 400 departed. The majority (over 80%) of GAO's staff are involved directly in development of GAO's audit and legal work while the remaining staff-provide mission and administrative support.

By the nature of its mission, GAO is an agency with significant mobility needs. Currently over 90% of the staff are provided with notebook computers and have telework agreements that permit them to work away from the office. Significant importance is attached to secure, high-reliability remote access to GAO's network. Since the requirement for mobility is so strong, so is the requirement for the protection of mobile information.

GAO has made significant progress in migrating from paper-based products and manual processes to execute its mission with electronic media from the inception of GAO's mission activities through dissemination of GAO's products. This shift improves the efficiency of the agency and the timeliness of the GAO product delivery to its clients, which places a heavier burden on information systems to ensure reliability and availability.

In addition, GAO is in the process of virtualizing its environment through Virtual Desktop Infrastructure (VDI), server virtualization, and application virtualization. These efforts are being procured through separate contracts.

a. VDI will include 80 to 90 percent of the organization's desktops. The remaining desktop devices are specialty towers that will continue to be used. GAO personnel are currently

encouraged not to store files on their desktops, for security and recovery purposes. As part of the VDI initiative, GAO is moving to Windows 7 from its current XP operating systems. All current laptops are out of warranty; however, it is expected that this situation will be overcome by the results of the VDI initiative. The new VDI environment will have a centrally located single golden image.

- b. Server virtualization will be implemented for 98 percent of the servers in the data center. It will include all of the servers in the field sites. There are two Novell servers supported currently that will be phased out with server virtualization.
- c. Application virtualization is a more time-consuming effort and is just beginning. The GAOl is for 80 percent of applications to be virtualized. The remaining 20 percent will be for specialty application, e.g. SPSS.

The majority of the VDI and server virtualization efforts are expected to be initiated in Fiscal Year (FY) 2013 and will carry over into FY 2014. Application virtualization is on-going. These initiatives and all major initiatives that are developed/provided by another contractor will be turned over to this TOR's contractor for O&M by the use of the GAO Governance process. GAO annually procures on average 20 major initiatives. Major initiatives are those that are introduced to the O&M environment by way of the GAO governance process, i.e. they will be reviewed in a Transition Readiness Review board and an Operational Readiness Review board.

In addition to VDI and Server Virtualization, GAO will be upgrading the Exchange system to 2010 and upgrading the Document Management system to OpenText DM version 5.3 in preparation for the VDI initiative. The Exchange system will eventually include a consolidation of the FO mail systems into a single enterprise instance with failover to the disaster recovery site. The VDI infrastructure is expected to support both Exchange 2010 and DM 5.3 as part of the operational baseline upon deployment.

GAO primarily uses Hewlett Packard (HP) servers. GAO Web Hosting and Publishing uses Linux servers. GAO also receives shared services for an IBM mainframe through the National Finance Center Government Shared Services program. GAO expects to continue usage of HP, IBM, and Linux equipment in its move to server virtualization.

GAO intends to move away from its very manual publishing process to a more automated process that will likely include creating and tagging XML or other content formats that can be repurposed into a variety of products. GAO is exploring more efficient methods and technologies to support analyst content creation and automating review and workflow processes and GAO expects to begin piloting a new system during the first year of the task order.

C.1.1 PURPOSE

The purpose of this task order is to acquire services to assist the GAO, in particular ISTS, in providing contracted information technology services that support the GAOls and objectives of the organization. This TO shall provide a single point of accountability to produce innovative, efficient, and cost—effective IT Infrastructure support service in alignment with industry best practices. GAO desires a collaborative environment with the contractor in order to achieve these GAOls/objectives.

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C.1.2 AGENCY MISSION

GAO's mission is to support the Congress in meeting its Constitutional responsibilities and to help improve the performance and accountability of the Federal Government for the benefit of the American people. Nearly all work performed by GAO is mandated in legislation or requested by Committee or Subcommittee Chairs, Ranking Minority Members, or members of appropriations, authorizing, budget, or oversight committees. Most of GAO's work is based upon original data collection and analysis, and is conducted in accordance with applicable professional audit and investigation standards. Three core values underlie GAO work:

- a. Accountability, to enhance the economy, efficiency, effectiveness, and credibility of the Federal Government.
- b. Integrity, to do work that is professional, objective, fact-based, nonpartisan, non-ideological, fair, and balanced.
- c. Reliability, to produce reports and other products that are timely, accurate, useful, clear, and candid.

GAO examines the use of public funds; evaluates Federal programs and activities; and provides analyses, options, recommendations, and other assistance to help the Congress make effective oversight, policy, and funding decisions. In this context, GAO works to continuously improve the economy, efficiency, and effectiveness of the Federal Government through the conduct of financial audits, program reviews and evaluations, analyses, legal opinions, investigations, and other services. GAO's activities are designed to ensure the executive branch's accountability to the Congress under the Constitution and the Federal Government's accountability to the American people. Additional information about GAO, including its organizational structure and office locations can be found at the following URL: www.gao.gov.

See Section J, Attachment T for GAO's Strategic Plan, Attachment F for the 2012 Update to GAO Strategic Plan 2010 to 2015, and Attachment S for GAO's organizational structure.

Additionally, See **Section J, Attachment U** for GAO's Lines of Business and Architecture Segments.

C.1.3 ORGANIZATIONAL STRUCTURE

GAO ISTS provides GAO's technology support. ISTS seeks to be a model Information Technology (IT) service provider for the GAO community. ISTS is the responsible organization for the primary oversight and technical direction within this task order. ISTS is organized as follows:

- a. Chief Information Officer, (CIO)
- b. Customer Relations Group (CRG)
- c. Budget, Acquisition, and Contracting Group (BACG)
- d. Engineering and Operations Group (EOG)
- e. Information System Security Group (ISSG)

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- f. Operational Readiness Group (ORG)
- g. Enterprise Architecture and Applications Group (EAAG)
- h. Publishing and Dissemination (PDG)
- i. Web Services Group (WSG)

See Section J, Attachment EE for ISTS' organizational chart.

C.2 SCOPE

This task order provides services and project support that emphasize network availability and access to all applications with minimal downtime as well as best-in-class customer service. The Government also attaches significant importance to reduction of fixed operational costs through consolidation, automation, and innovation. The equipment, software, and material required to perform the work under this task order is either provided by GAO or will be purchased by the contractor with Government authorization. The contractor shall provide the services described in subsequent sections. The contractor's performance will be measured against the Government's Service Area Metrics (SAMs) contained in **Section J**, **Attachment E**.

Although the scope of this TO is limited to infrastructure and operations support, the contractor shall provide services required to support new technologies that are developed (major initiatives performed as Projects) by other contractors/ vehicles to be introduced into the GAO production environment. The resultant contractor shall provide technical knowledge during Transition and Operational Readiness Reviews that result in the introduction of new initiatives to the production environment (this is further explained in **Section C.2.4**). Once accepted by the Government, the contractor shall operate and maintain the resultant product. The Government will familiarize the contractor with the Project initiative throughout the development process and through attendance of the Transition and Operational Readiness Review boards. The responsibility of training users on new capabilities will be with the initiative's contractor(s) and the Government. However, it is expected that the resultant contractor will utilize these materials and develop a deep understanding of any deployed systems in order to facilitate providing customer support via the Help Desk. Once the product enters its O&M life-cycle phase, the contractor shall be responsible for all maintenance of the resultant product. This may include interfacing with the development contractor on technical issues.

The contractor shall interface with third-party service providers such as WAN/MAN, Internet, Remote Access, and Extranet contractors (Shared Government Services). Some third-party service providers include Verizon (Voice, MAN), CenturyLink (WAN and Internet), and Cable TV companies, e.g., Comcast and DirectTV. In addition, the contractor shall resolve technical service issues between third-party service providers, e.g., Cisco and HP for the Government Furnished Property (GFP).

Although the major portion of contractor's work will be for an unclassified network, GAO also has a requirement to support the classified network located at Headquarters and 10 of the 11 field offices. Administrative support is conducted out of the Headquarters office with on-site support in the Field Offices using existing GAO staff. Limited travel to the FOs is required to support

this environment. All staff supporting the classified network must have a clearance of at least SECRET.

The contractor shall provide COOP failover support for all services hosted at the Alternative Computing Facility (ACF)/Disaster Recovery Site. The contractor shall support nightly replications of these to the ACF that functions as the GAO Disaster Recovery site. This site is shared with other Legislative branch agencies. Only Government personnel permanently staff the ACF. The Government may determine at a future date that additional applications/services must be supported at the ACF based on agency requirements.

The detailed requirements of this task order are specified in the following sections and shall be performed according to the standards stated in this task order.

C.2.1 LOCATION OF WORK

The contractor shall provide technical support during normal GAO business hours as well as outside of normal business hours. This support shall be provided to the GAO Headquarters facility at 441 G Street NW in Washington, DC. The contractor shall also have an on-site deskside support presence at GAO Headquarters and an on-site presence for SIPRNET support at GAO Headquarters during normal GAO business hours. However, the location of work may change over the life of the Task Order based on Government mandates, e.g. a requirement for GAO teleworking.

Examples of after-hours support include, but are not limited to, direct customer support, off-hour system management and maintenance, file backup and restore operations, deployment of selected applications, and annual and quarterly property inventories.

The contractor shall travel to GAO's 11 field offices (approximately 2-4 times a year, primarily to support GAO's classified data processing capability), and to the disaster recovery site (located approximately 35 miles from GAO Headquarters) on an as-needed basis. Travel to the disaster recovery site during non-emergency situations will be minimal based on the current support model that includes Government oversight and daily operations and maintenance of the facility. Currently, ninety-five percent of the contractor support for disaster recovery related operations and maintenance are conducted using remote management tools and processes.

The 11 field offices are located in the following cities across the country. Additionally, there are 5-10 audit sites throughout the Washington Metropolitan area.

- a. Atlanta Office, 2635 Century Parkway, Suite 700, Atlanta, GA 30345
- b. Huntsville Office, 6767 Old Madison Pike, Building #5, Huntsville Ala. 35806
- c. Boston Office, 10 Causeway Street, Room 575, Boston, MA 02222
- d. Chicago Office, 200 West Adams Street, Suite 700, Chicago, IL 60606-5219
- e. Dayton Office, AMC Branch, P.O. Box 33626, Wright-Patterson AFB, OH 45433-0626
- f. Dallas Office, 1999 Bryan Street, Suite 2200, Dallas, TX 75201-6848
- g. Denver Office, 1244 Speer Boulevard, Suite 800, Denver, CO 80204-3581

- h. Los Angeles Office, Los Angeles World Trade Center, 350 South Figueroa Street, Suite 101 Los Angeles, CA 90071
- i. Norfolk Office, 5029 Corporate Woods Drive, Suite 300, Virginia Beach, VA 23462
- j. San Francisco Office, 301 Howard Street, Suite 1200, San Francisco, CA 94105-2252
- k. Seattle Office, 701 Fifth Avenue, Suite 2700, Seattle, WA 98104

C.2.2 GAO HOURS OF OPERATION

The contractor shall provide the following types of response support:

- a. Data Center, Network Infrastructure, and Security monitoring support are required 24x7x365. Data Center, Network Infrastructure, and Security incident response can be addressed on-site or remotely unless remediation of the incident requires on site presence.
- b. Voice and e-mail Help Desk support are required during normal business hours, i.e., 6:00 a.m. to 7:00 p.m. (Eastern Standard Time (EST)).
- c. On-call Help Desk support is required during non-business hours (weekdays 7:01 p.m. to 5:59 a.m. EST and weekends and Federal holidays). If resolution cannot be provided during normal business hours then the issue will be addressed the next business day.
- d. Deskside support is required and shall be provided at GAO Headquarters during normal business hours.

Non-business hour service response times are reduced from business hour service response times and are defined in the respective SAMs (see **Section J, Attachment E**). The contractor shall follow the GAO holiday schedule.

C.2.3 WORK MANAGEMENT PROCESSES

GAO will provide work management models and processes that are a fundamental part of GAO's IT environment and a guiding framework for both service and project work. GAO has established its own IT Life Cycle and Work Management System Processes with which the contractor must interface.

The Work Management System (WMS) is utilized by ISTS for all project management and related purchase request activities. WMS serves as the central repository for ISTS project activities and supports the IT Governance Process by:

- a. Enabling the application of standard, documented, repeatable, and integrated processes for IT portfolios and project management.
- b. Serving as a centralized repository for all ISTS initiatives.
- c. Providing a single point of data entry for work documentation, proposals, and reports.
- d. Permitting collaboration across all of ISTS in the initiation, planning, and execution of initiatives.
- e. Enhancing prioritization of work, assignment of resources, and improvement in project performance and outcome delivery.
- f. Providing the ability to capture and report on accomplishments.
- g. Providing the ability to submit, approve, and archive purchase requests.

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The contractor shall provide software maintenance support for the WMS Application.

C.2.4 GOVERNANCE

There are two processes that govern how changes to the infrastructure are managed and approved: 1) the ISTS Governance Process Illustration and Narrative (see Section J, Attachment AA and Attachment CC), and 2) The System Change Request (SCR) Process (see Section J, Attachment H). The ISTS Governance Process governs the approval of major projects (initiatives) from proposal through post implementation review, while the SCR process oversees the planning, review, approval, installation ,and close out of all other changes (upgrades, enhancements, maintenance, emergencies, security patches, etc.). The contractor shall provide technical knowledge and assistance during these processes. The Government approves the results of all phase of the processes. The majority of the O&M work under this task order is managed through the SCR process. For major initiatives that undergo the ISTS Governance Process, the contractor shall be involved in the review process (the Transition and Operational Readiness Reviews), but not directly involved with the development of the project.

C.2.4.1 <u>ISTS GOVERNANCE PROCESS</u>

The ISTS Governance Process ensures that the design and development of major changes/initiatives are approved and that there is a successful handoff from developers / designers (engineering) to the O&M contractor (under the resultant TO). At three distinct points in the process, there is coordination among stakeholders to ensure agreement of project scope and schedule, as well as specific deliverables necessary for approval to proceed to the next phase (design, transition, operation).

Project Planning Phase: This phase occurs prior to project approval. The Government project manager and/or team will meet with the service design working group and the integrated assessment working group to ensure agreement of scope and schedule, as well as the specific deliverables required later in the project for moving from design to transition, and from transition to operation. The contractor shall provide technical advice during this phase.

Service Design Phase: During this phase, the project team produces the deliverables identified in the proposal as well as completes the technical design and development of the project. The completion of the Service Design phase occurs at a Transition Readiness Review Board meeting, where key stakeholders verify that all Service Design deliverables are completed and acceptable and that the project baseline scope and schedule are still accurate or whether they need to be adjusted. The contractor shall provide technical advice during this phase.

Service Transition Phase: During this phase, the project team transitions the project from designers / developers to the Infrastructure O&M contractor (under the resultant TO). All transition phase deliverables are reviewed and validated, software and/or hardware are installed in the Government-owned QA test lab, Quality Assurance tests are executed, Standing Operating Procedures (SOPs) are reviewed and validated, and knowledge transfer occurs between the project team and operations staff. The Government will provide oversight and be involved as

needed for all transition phase tasks, with the exception of acceptance testing. As related to the transition phase, the Government will lead the execution of acceptance testing that includes Government reviewed and approved test scripts, with Government-controlled support from the contractor. The completion of the Service Transition phase occurs at an Operational Readiness Review Board meeting, where key stakeholders verify that all Service Transition deliverables are completed and acceptable, and that Operational staff with contractor assistance are ready to deploy the project into production and maintain and support it going forward.

C.2.4.1.1 THE FRONTRANGE IT SERVICE MANAGEMENT (ITSM) SYSTEM

The contactor shall use The FrontRange IT Service Management System (ITSM) to capture all operational work. FrontRange ITSM is designed to manage day-to-day activities in an IT organization. FrontRange ITSM is also used to escalate service requests beyond the Help Desk. As such, most contract staff are required to use FrontRange ITSM regularly to track activities across ISTS. Additionally, the contractor shall provide database support for FrontRange ITSM, which includes software updates; the creation of new categories, subcategories, types, and service request forms; adding new users; providing demos to staff on how to use the system; and upkeep of all system documentation.

The FrontRange ITSM modules currently used by GAO to support IT functions are Incident Management / Service Request, Knowledge Management, and Problem Management. For each module, there are concurrent licenses to accommodate 100 users. In the future, GAO will provide access to users for the Change Management, Configuration Management, and Service Level Management modules. Presently, each module has 25 concurrent licenses. These are only accessible to administrator users.

For the Change Management Module GAO anticipates completing the assessment of the technology solution and implementing the permanent automated solution by the end of FY 2013. The number of licenses required would need to support all staff across ISTS who participate in the Change Management process (creating "System Change Requests", Authorization, Implementation, and Closeout), but the exact number is unknown at this time.

The FrontRange ITSM allows GAO to track service-related interactions between the IT organization, users, and customers. ISTS is not the only user of the ITSM Suite. Other GAO service providers (including such diverse services as Records Management, Acquisition Management, Human Capital, and Library Services) use ITSM to track service requests not related to IT and not part of this TO. Approximately 350 contract and Federal staff routinely use ITSM across GAO.

Descriptions of ITSM Modules Used at GAO:

Incident Management

The Incident Management module is used to identify events causing service interruptions or reductions in the quality of service. It allows system administrators to adapt application objects and business priorities to reflect GAO business priorities and processes.

Problem Management

The Problem Management module is used to support the elimination of recurring incidents from GAO's IT infrastructure for improved IT operations and customer productivity. In particular, causes of similar incidents are identified, permanent resolutions are determined, and a prevention plan is developed.

Knowledge Management

The Knowledge Management module is a tool for building knowledge repositories, creating access that allows staff to easily perform knowledge related searches, discover resolutions for existing incidents, and locate documentation that will be valuable.

Configuration Management

The Configuration Management module provides support for planning, identifying, controlling and verifying the Configurations Items (CIs) within a service, recording their status; and, in support of Change Management, assessing the potential IT impact of changing those items. GAO is not currently using the CMDB capability of this module.

Change Management

The function of the Change Management module is to provide a standardized method and procedure for handling change requests, minimizing the impact of change-related issues and improving daily operations. GAO is moving toward the use of the Change Management module. Currently change management is performed using spreadsheets.

The contractor shall continue to use the FrontRange ITSM application and procedures to support Incident Reporting, Change and Configuration Management, Software Retirement, and Integrated Quality Control. The contractor shall implement and maintain additional Government-approved FrontRange functionality that provides useful support to the GAO mission.

C.2.4.2 SYSTEM CHANGE REQUEST (SCR) PROCESS

The ISTS SCR process is designed to ensure coordination and approval of all technical changes to the production network, ensuring that stakeholders are fully aware of changes and their impact to systems, customers, and operations. The contractor may request a system change by completing the System Change Request (SCR) form. The form is then sent electronically to the manager of the Change Advisory Board (CAB) who forwards it to board members to allow time for impact and other assessments, or necessary collaboration and technical discussion prior to the CAB meetings, which are held twice weekly.

The change is reviewed at a scheduled CAB meeting and either approved / disapproved / deferred. Approved changes will be forwarded onto the network deployment and maintenance manager for scheduling. Changes that require additional action or are not approved will be returned to the requestor indicating the action required or reason for non-approval.

There are approximately 15 to 20 SCRs per month.

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C.2.4.3 SERVICE AREA METRICS (SAM)

The contractor shall monitor and report on performance against the SAMs. In order to maintain a strong posture, continuous review and improvements in performance are necessary. The GAO will review all performance reports to validate contractor performance. The contractor shall work in partnership with the appropriate GAO organization to jointly maintain the SAMs

The contractor shall meet or exceed the service performance levels specified for each service area. SAMs provide Acceptable Quality Levels (AQL) for key performance indicators, detailed descriptions of these performance indicators, their targets, and how they are measured. The contractor shall provide a mitigation plan with the MSR that describes the contractor's plan for meeting any unmet SAMs by the next reporting period. See **Section J, Attachment E** for all SAMs.

C.3 TASKS

C.3.1 TASK 1 – PROVIDE PROGRAM MANAGEMENT

The contractor shall provide program management support under this TO. This includes the management and oversight of all activities performed by contractor personnel, including subcontractors, to satisfy the requirements identified in this Performance Work Statement (PWS). The contractor shall identify a Program Manager (PM) by name who shall provide management, direction, administration, quality control, and leadership of the execution of this TO.

C.3.1.1 COORDINATE A PROJECT KICK-OFF MEETING

The contractor shall schedule and coordinate a Project Kick-Off Meeting (see Section F, Deliverable 1) at the location approved by the Government. The meeting will provide an introduction between the contractor personnel and Government personnel who will be involved with the TO. The meeting will provide the opportunity to discuss technical, management, and security issues, and travel authorization and reporting procedures. At a minimum, the attendees shall include vital contractor personnel (including Key Personnel), representatives from the directorates, other relevant Government personnel, and the FEDSIM COR. At the Kick-Off meeting, a Project Kick-off Agenda (see Section F, Deliverable 2) that includes at a minimum the following topics:

- a. Points of contact including GAO Technical Monitors
- b. Security considerations
- c. Invoicing considerations
- d. Transition discussion

C.3.1.2 PREPARE A MONTHLY STATUS REPORT (MSR)

The contractor PM shall develop and provide an MSR using Microsoft (MS) Office Suite applications, to the Technical Point of Contact (TPOC) and the COR (see **Section F, Deliverable 3**). The MSR shall include the following:

- a. Activities during the reporting period, by task (include: on-going activities, new activities, activities completed; progress to date on all above-mentioned activities). Start each section with a brief description of the task.
- b. Problems and corrective actions taken. Also include issues or concerns and proposed resolutions to address them.
- c. Personnel gains, losses, and status (security clearance, etc.).
- d. Government actions required.
- e. Schedule (show major tasks, milestones, and deliverables; planned and actual start and completion dates for each).
- f. Summary of trips taken (attach trip reports to the MSR for the reporting period).
- g. Items purchased on behalf of the Government during the month.
- h. Accumulated invoiced cost for each CLIN up to the previous month.
- i. Projected cost of each CLIN for the current month.
- j. Monthly Performance against the SAMs (contained in a separate section and shown in comparison to the Government's SAM Performance Standards). The contractor shall discuss all measures that do not meet the Performance Standards and provide mitigation that can be completed by the next monthly reporting period. The contractor shall include in every monthly status report, their performance against the stated SAMs during the time period of the report.
- k. List of all deliverables, by full name, delivered during the period reported through the MSR.

C.3.1.3 CONVENE TECHNICAL STATUS MEETINGS

The contractor PM shall convene a Technical Status Meeting, as needed, with the TPOC, COR, and other vital Government stakeholders. The purpose of this meeting is to ensure all stakeholders are informed of the monthly activities and MSR, opportunities are provided to identify other activities and establish priorities, and to coordinate resolution of identified problems or opportunities. The contractor PM shall provide minutes of these Technical Status Meeting Minutes (see **Section F, Deliverable 4**), including attendance, issues discussed, decisions made, and action items assigned, to the TPOC and COR.

C.3.1.4 BUDGET BRIEFINGS

The contractor shall provide Budgetary Briefings (see Section F, Deliverable 5). The contractor shall modify the content and format of this briefing according to the Government's instructions. The Budgetary Briefings shall include, at a minimum:

a. A list of the GAO service areas by numerical subtask.

- b. A spreadsheet with the costs (actual and projected) for each service area by past and current fiscal year.
- c. A spreadsheet detailing funding (actual and projected) for each CLIN with separate columns for average monthly burn rates.

C.3.1.5 <u>INTEGRATED PROJECT TEAM (IPT) MEETINGS</u>

The contractor shall provide weekly IPT meetings with the GAO TPOC, COR, and other key Government stakeholders. The purpose of these meetings is to ensure all stakeholders are informed for the project's weekly activities and the status of all outstanding issues. The contractor shall document the attendees and proceedings in an IPT Meeting Agenda (see Section F, Deliverable 6).

C.3.1.6 PREPARE TRIP REPORTS

The Government will identify the need for a Trip Report when the request for travel is submitted. The contractor shall keep a summary of all long-distance travel including, but not limited to, the name of the employee, location of travel, duration of trip, and points of contact (POC) at travel location. The contractor shall provide a Trip Report (see **Section F, Deliverable 7**) as requested by the Government.

C.3.1.7 <u>DOCUMENTATION SUPPORT</u>

At a minimum, the Contractor shall develop and provide the following documentation:

- a. Training Manuals and Technical User Guides (see Section F, Deliverable 45).
- b. Updates to Standard Operating Procedures (SOPs) and System Documentation (see **Section F, Deliverable 18**) based on the index and updated when there are system changes.
- c. Workflow Process Information (see Section F, Deliverable 44).
- d. COTS Updates/Modification Plans (see Section F, Deliverable 43).

The documentation shall be updated on an as needed basis and as applicable upon the Government's request.

C.3.1.8 ANCILLARY PRODUCTS/SERVICES SUPPORT

The contractor shall purchase hardware, software, and related supplies under the TO. Such requirements will be identified during the course of a TO, by the Government or the Contractor. The contractor shall initiate a purchase (at any dollar value), by submitting an approval request to the applicable GAO point-of-contact. The request shall include the purpose, specific items, estimated cost, and rationale for the purchase. The Contractor shall not make purchases without the Government's approval. Purchases over the micro-purchase threshold must receive a CORapproved Request to Initiate Purchase. For purchases under the micro-purchase level, the contractor shall coordinate via email with the COR.

C.3.1.9 REMOVED

C.3.1.10 PERFORMANCE MEETINGS

a. GAO, the contractor, and the FEDSIM COR will meet weekly for a Joint Meeting to evaluate contractor performance against the GAO expectations and the SAMs

The following types of issues will be discussed:

- Monthly performance assessment data and trend analysis.
- Issues and concerns of both parties.
- Projected outlook for upcoming months and progress against expected trends, including a corrective action plan analysis.
- Issues arising from the performance monitoring processes.

C.3.2 TASK 2 – TRANSITION-IN

The contractor shall execute its Transition-In Plan no later than (NLT) five work days after Project Start (PS). During the transition in, the contractor shall ensure that there will be minimum service disruption to vital Government business and no service degradation during and after transition. All transition activities shall be completed 45 calendar days after PS (January 10th 2014). The contractor shall provide a Updated Transition-in Plan (see **Section F**, **Deliverable 8**) based on the contractor's proposed plan.

C.3.3 TASK 3 – TRANSITION-OUT

The Transition-Out Plan shall facilitate the accomplishment of a seamless transition from the incumbent to an incoming contractor/Government personnel at the expiration of the TO. The contractor shall provide a Transition-Out Plan (see **Section F, Deliverable 9)** NLT 90 calendar days prior to expiration of the TO. The contractor shall identify how it will coordinate with the incoming contractor and/or Government personnel to transfer knowledge regarding the following:

- a. Project management processes.
- b. Points of contact.
- c. Location of technical and project management documentation.
- d. Status of ongoing technical initiatives.
- e. Appropriate contractor-to-contractor coordination to ensure a seamless transition.
- f. Transition of Key Personnel.
- g. Schedules and milestones.
- h. Actions required of the Government.

The contractor shall also establish and maintain effective communication with the incoming contractor/Government personnel for the period of the transition via weekly status meetings. The contractor shall execute transition out activities In Accordance With (IAW) the Government-approved Transition-out Plan.

C.3.4 TASK 4 - CUSTOMER SERVICES

These services support GAO internal customers consisting of Government and contractor personnel.

C.3.4.1 HELP DESK

GAO requires the services of a contractor to provide all IT Help Desk and on-site Deskside Support for Customer Support Services. The contractor shall provide all IT Help Desk and Deskside Support for the GAO staff located at the Headquarters. In addition, phone support is needed for staff in the eleven field offices located across the U.S. There is a single point of contact for Headquarters and the field sites to initiate Help Desk support. The Help Desk currently receives on average 3,800 calls per month and 1,500 email requests per month. Approximately 7,700 incidents are opened per month. The 7,700 estimate reflects additional direct requests to Deskside Support staff that may not come through the Help Desk (e.g. walkups) and project-related activity such as replacement of new IT equipment. The call volume will fluctuate given the work volume of the GAO analysts and the Congressional cycle. Once a technician resolves the incident an email is sent to the customer asking them if their issue has been resolved. After 3 days the incident is automatically closed unless the customer contacts the Help Desk and says otherwise.

Incidents are captured in FrontRange ITSM and categorized by type. Approximately, seventy percent of the total incidents relate to failures (trouble or problem calls), 20% are requests for service, 10% are "how-to" questions. The majority of calls for failures relate to access to documents in the GAO document management (DM) system, remote access, and forgotten RSA SecurID tokens used for login. Requests for service are typically for telecom "Meet Me" conference calls, video conference request, and audio visual equipment setup. The majority of the "how-to" questions are for the DM system and the Outlook mail system. Calls shall be responded to IAW **Section J, Attachment E,** SAMs. If the call cannot be resolved over the phone the contractor shall continue resolution on the next business day. Historically, on average there are 33 'after-hours' calls per month. See **Section J, Attachment BB** for Help Desk call statistics.

The contractor shall provide customer support services for approximately 3,200 GAO and contractor staff across the continental United States. Contractor support is needed to provide direct support on-site to approximately 2,300 (2,000 Government and 300 contractor) staff in the GAO Headquarters building across 6 floors. Phone support is needed for approximately 900 Government staff located in the 11 field offices. Currently contractor support is provided for a central Help Desk located on the first floor in the GAO Headquarters building as well as deskside support with contractor personnel physically located on floors 1, 2, 4, 5, 6, and 7. The Help Desk room has low cubicle partitions that provide space for a maximum of 10 technicians.

Thirteen cubicles throughout the building are available for Floor Support (3 on the first floor, 2 on the second, fourth, fifth, sixth, and seventh floors). All space and hardware will be provided by the Government. See **Section J, Attachment W** for a list of GFI.

Deskside support is not required for GAO FO locations. Dedicated Federal staff provide customer and overall engineering support in each field office.

C.3.4.1.1 INCIDENT MANAGEMENT/SERVICE REQUEST MANAGEMENT

The contractor shall utilize the GAO-provided Avaya PBX Call Management system to monitor and distribute calls to the Help Desk. The Call Management system is currently not integrated with the FrontRange tracking system. The contractor shall provide the following incident management/service request management support at a minimum:

- a. Help Desk support for the GAO network.
- b. Provide Troubleshooting on all GAO workstations and peripherals IAW all specified performance metrics.
- c. Be the first point of contact for all customer facing IT requests (phone support and email).
- d. Log all calls in the customer call tracking system (FrontRange ITSM) software to document all customer problems and resolutions.
- e. Maintain the GAO knowledge database of problems and their resolutions.
- f. Conduct Customer Quality Assurance surveys on all closed trouble and how to calls in addition to periodic surveys as needed.
- g. Provide initial problem resolution for all calls on IT hardware, software, and telecommunications.
- h. Respond to requests for service (loaner equipment, AV setup, VTC, Telecom service, etc.).
- i. Escalate calls as appropriate.
- j. Monitor the GAO Network for equipment outages, system and software problems, etc., through customer calling trends.
- k. Provide new hire account testing and walk customer through the initial login process of RSA SecurID Token setup, PIN and Windows password during orientation classes. New hire classroom orientation, run by Federal staff, is held every other week and provides an overview of how to access the GAO network and the major applications used by GAO.

C.3.4.2 DESKSIDE SUPPORT PROVISIONING

The contractor shall provide direct Deskside Support, including provisioning of IT assets, on each floor of GAO HQ (except Floor 3, which is occupied by the Corps of Engineers). The contractor shall be physically located throughout the GAO Headquarters building in close proximity to the GAO customers to provide direct support. Deskside Support staff shall provide, as a minimum, the following support:

a. On-site Deskside Support:

1. Complete all new employee account adds/moves/changes/deletions.

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- 2. VTC session setups.
- 3. Delivery and setup of all IT equipment (computers, monitors, printer, blackberries, etc.) to include AV deliveries and setup.
- 4. Limited specific one-on-one "how to" support to individual customers
- 5. The contractor should be prepared to have one to two Deskside Support staff familiar with specialized activities and software for GAO-specified groups in addition to their normal duties. The specialized Deskside Support staff shall be able to provide standard Deskside support as well as specialized support. Specialized support consists of troubleshooting problems associated with the various software applications used by these GAO-specified groups in conjunction with user work processes (see Section J, Attachment W for a list of software). Currently, this support is provided to two such GAO groups: The Applied Research Methodology Team and GAO Legal staff.
- 6. Database support for the customer call tracking system (FrontRange ITSM software). This includes software updates; the creation of new categories, subcategories, types, and service request forms; adding new users; providing demos to staff on how to use the system; and upkeep of all system documentation.
- 7. Generate, monitor, and track open trouble tickets through resolution and report the statistics to the GAO Customer Support Services Manager.
- b. **Deployment Planning and Implementation Support:** The contractor shall periodically assist GAO staff in the planning for and implementation of larger-scale provisioning or rollout activities such as new notebooks, new RSA SecurID tokens, new images, etc. The contractor shall provide these services without loss in performance for other tasks.

The contractor shall track the monthly metrics in C.3.4.3 below and provide a Help Desk Report (see Section F, Deliverable 46) that shall be placed in GAO's official document management system (DM), with the coding and access rights provided by GAO.

C.3.4.3 HARDWARE/SOFTWARE/ASSET MANAGEMENT AND LOGISTICS

The contractor shall provide services to all IT asset management functions using HP's Asset Manager software. Throughout this section, the term "asset" is used for both hardware and software, and includes both electronic and physical copies of software. The contractor shall manage and process the IT asset inventory as well as provide basic on-site hardware repairs.

The contractor shall be responsible for activities relating to the life-cycle management of IT assets at the agency, including the maintenance and management of centralized inventory control and configuration of information technology assets. The contractor shall operate and occupy the ISTS Logistics and Hardware Management facilities at 441 G Street, NW, Room B125 (and storage facilities at GAO headquarters). These services shall be provided on-site at the agency's facilities, for the entire duration of this Task Order. The salient characteristics of this task's physical scope are set forth below. The contractor should take special note that the SOPs must be strictly complied with in providing the services in this area (see **Section J, Attachment Z**). From time to time, special situations such as the delivery and provisioning of mass purchases may require deviation from the SOPs. In these instances, the event-specific procedures will be provided by the Government. See **Section J, Attachment M** for a list of the current inventory.

C.3.4.3.1 INVENTORY MANAGEMENT

The contractor shall process and manage the IT asset inventory. It is critical that the inventory be managed to account for peak periods such as the arrival of interns, major influxes of new employees, and special events. The contractor shall manage (i.e., receive, store, disburse, and identify for excess) agency IT assets, including, but not limited to, desktop computers, laptops, printers, copiers, AV equipment (projectors, portable screens, data monitors, etc.) network equipment (servers, routers, etc.) software and local consumables and, shall coordinate maintenance functions for specified IT assets of the agency. The contractor shall make official records regarding asset receipt available in a timely manner to GAO's Facilities and Property Management (FPM) staff. The contractor shall maintain appropriate copies of records it receives regarding purchasing/invoicing in the context of managing IT assets.

The contractor shall maintain an inventory of replacement assets and spare parts to be used to provide replacements, remedial maintenance and upgrades to IT assets used in GAO. This inventory record shall be maintained on a real-time basis. Threshold levels must be maintained in accordance with **Section J**, **Attachment HH** so that stock items are available. The field offices maintain their own stock; however, the contractor shall refurbish those stocks as needed by the field sites.

The contractor shall perform IT asset management operations from 6:00 AM to 7:00 PM, Washington, DC local time, Monday through Friday (excluding agency holidays). The contractor shall coordinate with the GAO's Facilities and Property Management unit to receive IT assets into GAO facilities. Once FPM has officially accepted the equipment, barcoded it (as appropriate), and entered the asset data into HP Asset Manager, the contractor shall move material from the receiving area into a storage location in accordance with the established/agreed upon storage procedures. The contractor shall complete all in-processing, including opening boxes, completing any required acceptance testing (powering up as needed, etc.), and ensuring secure storage within 2 business days. This process includes verifying, comparing against packing slips and purchase orders, assessing equipment for damage (using procedures agreed upon by ISTS staff), and notifying the vendor and agency personnel of any discrepancies.

a. **Asset Tracking:** The contractor shall provide hardware and software asset management services throughout any asset's life cycle. The contractor shall ensure accountability for assets under its control and shall capture data in Asset Manager when assets are provisioned. The contractor shall complete reconciliation activities; Asset Manager data compliance activities, report generation, trend analysis, periodic inventory reviews, inventory reconciliations, assist in asset management operational compliance reviews, and document gathering and Asset Manager data maintenance for COTS software licenses. The contractor shall work closely with GAO's FPM staff (who "own" Asset Manager) to ensure that internal controls are maintained. The contractor shall also work closely with ISTS' Help Desk staff to ensure that FrontRange ITSM is updated appropriately to ensure that actions related to equipment provisioning are maintained appropriately in the customer's record.

- b. **Provisioning of Equipment:** The contractor shall coordinate with Help Desk and/or Deskside Support to provision equipment to users. The contractor shall respond to requests for hardware and software through agreed-upon procedures. Processes/procedures will be discussed and agreed upon prior to large provisioning events (e.g., rollout of new notebooks, Blackberries, etc.). The contractor is typically responsible for ensuring that end-user devices are provisioned with the appropriate image, etc.
- c. **Data Security:** During the redeployment or distribution of hardware, extreme care shall be taken with regard to the data that may be on the hard drives or other data-holding devices. Upon receipt of assets that may contain data (laptops, towers, or external hard drives, etc.,) the contractor shall ensure that the receipt of the asset is properly recorded in Asset Manager. Further, the contractor shall hold the device for five business days in a storage area restricted according to GAO requirements. Once the asset has past the five day holding period, the contractor shall ensure that all data has been properly removed from the device using software tools approved by the ISTS' Information Systems Security Group and the Office of Security. The contractor shall ensure that all devices being re-deployed or held in surplus, are properly cleaned using this method.
- d. **Media Sanitation:** Hard drives and other data holding devices, whether part of a workstation, laptop, or stand-alone, shall be processed for disposal in accordance with established procedures. The contractor shall certify that such action has been taken.
- e. **Distribution to Field Offices:** The contractor shall distribute IT assets to and receive returned assets from agency locations nationwide. The contractor shall prepare all items for shipment and delivery to the GAO receiving unit or mailroom, as appropriate. Extreme care shall be taken to obtain receipts from receiving unit and mailroom staff. The contractor shall order and maintain adequate shipping supplies. Actual shipping costs outside of the DC metro area shall be borne by the GAO.

C.3.4.3.2 BASIC REPAIR AND WARRANTY MANAGEMENT

The contractor shall perform basic HQ's on-site hardware repairs and shipping out of hardware for warranty repair/replacement. GAO performs minimal diagnostics and basic hardware repairs only. As part of basic repair, the contractor shall replace electronic components (e.g. cards, fans, power supplies) or replace entire units. All major repairs and needs for replacement units are handled by means of warranties or other types of maintenance agreements. Items mailed out of GAO for repair or replacements include, but are not limited to, notebooks, hard drives, motherboards, docking stations, and monitors. As defective customer-specific devices (notebooks, workstations, monitors, keyboards, etc.) are typically swapped out immediately at the customer's office in order to avoid downtime, the determination of what to do with any such item is generally made in the contractor's work area. The contractor shall determine whether any given item is (1) reparable on-site by contractor staff, (2) reparable but requires work by a manufacturer or other authorized vendor, or (3) irreparable. Items falling under categories (2) or (3) may be covered by either a warranty or maintenance agreement. If not covered by any such agreement, irreparable items are excessed in accordance with SOPs. Maintenance agreements will be provided as GFI (see Section J, Attachment DD). Devices containing data will

generally be wiped clean using software tools provided by the ISTS' Information Systems Security Group and the Office of Security prior to sending them to the vendor for repair or replacement unless special circumstances warrant agreement between ISTS/CRG and ISTS/ISSG that the device be sent forward "as is." See Section J, Attachment X for historical data regarding break-fix incidents.

C.3.4.3.2.1 REPORTING (BASIC REPAIR AND WARRANTY MANAGEMENT)

The contractor shall track the elements contained in the SAMs (see Section J, Attachment E) and provide a Hardware Maintenance and Repair Report (see Section F, Deliverable 11) that will be placed in GAO's official document management system (DM), with the coding and access rights as agreed to by GAO. The contractor shall provide the following:

- a. Listing of all assets capable of holding data sent out for warranty repair/replacement and the status of each asset, including the turnaround time between shipments from GAO to receipt in GAO. Any items whose turn-around-time (TAT) exceeds that anticipated shall be specifically noted along with the reason for the excessive time.
- b. Listing of all Assets capable of holding data sent to and received from the FO staff and the status of each asset, including the TAT between shipments from GAO to receipt in GAO. Any items whose TAT exceeds that anticipated at the time of shipping shall be specifically noted along with the reason for the excessive time.
- c. Beginning and end-of-month quantity levels for key assets including but not limited to notebooks, monitors, servers, printers, mice, keyboards and hard drives.

Current hardware inventory procedures include use of a spreadsheet that tracks inventory levels and generates alerts when reorder thresholds are met. The contractor shall provide recommendations to increase the efficiency and effectiveness of this process.

C.3.4.4.2.2 <u>DEPLOYMENT PLANNING AND IMPLEMENTATION</u>

The contractor shall periodically assist GAO staff in the planning for and implementation of larger-scale (historically, 1-3 additional staff for 8-12 weeks through implementation) provisioning activities for items such as new notebooks, new RSA SecurID tokens, and new images. Depending on the nature of the effort, specialized knowledge and experience will be required. The contractor shall maintain required performance levels in daily tasks/requirements during these times.

C.3.5 TASK 5: OPERATION SUPPORT SERVICES

See Section J, Attachment Y for historical processes relating to operational support.

C.3.5.1 OPERATION SUPPORT SERVICES OVERVIEW

Operational support services provide the day-to-day operational support at GAO Headquarters, GAO's 11 Field Sites, and GAO's Alternate Computing Facility (ACF). For the GAO Network services to be effective, such services require a collaborative work environment between

network, server, application, and security responsibilities to ensure the availability and effectiveness of IT services for GAO.

The Engineering and Operations Group (EOG) is responsible for the majority of support activities in maintaining the operational IT services and ensuring the availability of that service. The EOG oversees an Infrastructure Monitoring Center (IMC) which is the initial monitoring and problem-solving function. The IMC identifies degraded services and resolves or escalates those issues to dedicated IT professionals supporting that area of expertise. EOG services also include server provisioning, administration, and maintenance. In addition, the EOG services include managing the transport mechanisms that support the communications across all networking devices. In maintaining the GAO infrastructure, patching and upgrading of existing technologies is a routine service and deployment of new applications and technologies is a coordinated event.

The GAO provides information security measures to comply with the technical, operational, and management controls associated with GAO's information systems, applications, and network. In simplistic terms, information security is implemented from both a technical and compliance perspective. To effectively support this effort, the GAO has followed a "defense-in-depth" approach in the implementation of technologies, policies, and procedures necessary to protect GAO information systems and information from denial of service, unauthorized disclosure, modification or destruction of data on the GAO network or the information processed within. The Information Systems Security Group (ISSG) is responsible for the effective implementation of security controls throughout the GAO, with specific responsibilities in Protection and Detection Services.

The Protection and Detection Service provides the technical implementation of GAO's security policies by implementing "best practices" in providing a layered approach to perimeter, network, and endpoint device and data protection. This service operates a Security Operations Center (SOC), which is responsible for the implementation and maintenance of security technologies, monitoring system and network events, detecting security attacks and breaches, coordinating response to security incidents, conducting forensic assessments, identifying vulnerabilities and assessing their risks, ensuring security solutions align with the GAO's architecture, and supporting security assessments and authorizations.

There is one SIPRNET enclave located in the SOC and there is one enclave located in 10 of the 11 field offices. There are approximately four work stations with each enclave. Of GAO's 232 applications, 35 have been designated as requiring FISMA compliance. All FISMA certifications are done at the moderate level. The only application on the SIPRNET itself is email.

The primary GAOl of the operational support services is to ensure a secure and operationally effective infrastructure to support the confidentiality, integrity, and availability of IT services.

C.3.5.1.1 OPERATIONAL INITIATIVES AND SCHEDULING SUPPORT

The operational initiatives and scheduling support activity is responsible for ensuring that an Integrated Master Schedule (IMS) is maintained that includes all tasks including regularly scheduled maintenance, operational support initiatives and those tasks associated with the completion of SCRs. The IMS is a tool used by ISTS management to ensure timely reporting and informed decision making as it relates to the health and operational status of the GAO IT operational/QA/Test/Dev environment. Currently the integration of the schedule is performed by GAO using a combination of Microsoft products. The Government desires a fully integrated solution (see Section J, Attachment YY for the IMS template). The contractor shall:

- a. Develop and maintain an IMS (see **Section F**, **Deliverable 12**) that includes an account of the resources applied to each task and updates to support scheduled status meetings.
- b. Participate in, and contribute to, GAO meetings to discuss/determine resource allocation and resource contention in accordance with Government priorities/expectations.
- c. Maintain a Risk Register associated with the IMS.

Note: The IMS along with existing tools and processes are part of an integrated decision management approach to operational risk management. The outcome of IMS status meetings is the capture of task related risks, level of effort, priorities and timelines as well as the action items assigned by the Government in support of this task area.

C.3.5.2 MONITORING SERVICES

The contractor shall use current management tools (Solarwinds) to perform proactive monitoring of the network architecture and all services end-to-end as well as changes to device configurations. The contractor shall track all network component failures and escalation actions. A system trouble ticket (FrontRange ITSM Ticket) will be generated and escalated for follow-up and troubleshooting purposes. Output from Solarwinds monitoring is not currently integrated with the FrontRange tracking system. Currently, the process for monitoring, notification, escalation, and reporting is semi-manual. Solarwinds generates events that are documented in ITSM as incidents. The tickets are escalated via a deliberate action taken by a system user who forwards/places that ticket in the appropriate queue. Notifications for tickets are generated by the system to alert queue members of the ticket's presence. Reporting is both automatic based on predetermined formats and distribution lists as well as on an ad hoc basis. The contractor shall ensure the following functions are accomplished:

- a. Provide performance monitoring and management of GAO's Core Services that are defined below. The contractor shall provide a Service Report (see **Section F, Deliverable 13**) that is readily accessible by the Government for monitoring and validation purposes.
- b. Participate in joint meetings regarding performance measurements and reporting.
- c. Collaborate with the Government (within 60 days of project start) to develop measurements that provide a comparison between contractor actual performance against Government-desired performance and provide Government-specified reports documenting these measurements.

All collected results from monitoring activities are currently analyzed using MS Word.

For a more detailed understanding of the network topology and the devices it supports, see **Section J, Attachment J** and **Attachment JJ.**

C.3.5.3 <u>INFRASTRUCTURE MONITORING CENTER SERVICES</u>

The Infrastructure Monitoring Center (IMC) collaborates as a team (contractor and Government) and performs functions from a central room at GAO headquarters to enhance and optimize operational abilities and service capabilities in monitoring and managing IT services for the agency. The current capacity for the IMC holds up to eight contractor personnel. The IMC shall be monitored 24x7. Monitoring staff will be onsite 24x7, excluding Federal Holidays when oncall engineers will respond to alerts. The IMC provides network fault and performance monitoring, problem tracking, and escalation to ensure continuity of operations.

C.3.5.4 <u>SECURITY OPERATIONS CENTER SUPPORT SERVICES</u>

Security Operations is responsible for assuring that all of the security controls needed to protect the systems and data are properly implemented. Security Operations provides the technical implementation of GAO's security policies by implementing "best practices" in providing a layered approach to perimeter, network, and endpoint devices and data protection. This service operates a Security Operations Center (SOC), which is responsible for but not limited to the implementation of security technologies, monitoring systems and network events, detecting security attacks and breaches, coordinating responses to security incidents, and reporting vulnerabilities. Staff will be onsite during core business hours to respond to alerts. After hours, and on Federal Holidays, on-call engineers will respond to alerts. The SOC is physically located at the GAO headquarters. The space of the SOC has the capacity to accommodate GAO's contractor personnel.

The SOC operates primarily within the operations portion, but has additional responsibilities within the engineering processes that support the business and design functions of ISTS.

C.3.5.4.1 REMOVED

C.3.5.5 PHYSICAL INFRASTRUCTURE AND MAINTENANCE SERVICES

This service is for the management and maintenance of the physical infrastructure of GAO's IT Operations. It involves the management of inventory and the installation and physical configuration of hardware devices.

C.3.5.5.1 <u>DESKTOP SERVICES</u>

The support provided under this task area is required to meet the needs of all GAO users. GAO users include Standard, Elevated, Power as well as Remote Users and users at alternate work locations. "Standard" refers to the general user desktop requirements associated with the FDCC configuration applied to most GAO laptop and desktops. "Elevated" refers to the specific application level privileges needed to launch and use specialty applications not included in the

standard image. "Power" refers to the desktops and laptops that require administrator level or the equivalent level of privileges.

Service will include users at GAO Headquarters in Washington, DC and within the 11 field sites across the country and will cover approximately 3,200 Government and contractor personnel.

C.3.5.5.1.1 SUPPORT HARDWARE/ENDPOINTS

The contractor shall provide support for the following:

- a. Desktops, laptops, thin clients, statistical/ARM computers, PCs used within both connected and off-net LABs.
- b. Access to GAO server resources, data, systems, printers and peripherals.
- c. Operating systems (OSs), Commercial off the Shelf (COTS) software, and custom developed software.
- d. Access to the GAO wide area network (WAN) and the Internet.
- e. Support for deployment of technical refresh of GAO's computing endpoints. GAO's policy is to do rollouts of new equipment/features as single event.
- f. Training and Conference Room Support.

GAO's standard hardware and configurations are subject to a quarterly review which may change depending on available hardware from manufacturers and the incorporation of evolving technology. The Government will consider future hardware purchases, such as tablet computers and mobile devices with varying OSs. Hardware and software maintenance renewals will be coordinated through this Task Order. See **Section J, Attachment W** for a complete list of all current software tools. Other future technology yet to be defined may also be included (e.g. virtual desktops). The contractor shall provide the following support:

- a. Installation, implementation, provisioning, maintenance, de-provisioning, decommissioning, removal, and disposal of IT infrastructure through GAO's Office of Facilities Management.
- b. Maintain an awareness of the quality, efficiency, and cost-effectiveness of all services provided, with a continuing emphasis on devising and developing better methods and/or procedures to provide the IT infrastructure required by the GAO user community to meet present and future needs in support of GAO's mission.
- c. Coordinate and collaborate with other GAO infrastructure IT service providers (e.g. VoIP, PBX, switches, routers, hubs, Wireless LANs, network wiring, mobile telephone services, landline telephones, audio/video equipment and services).

C.3.5.5.1.2 SUPPORT DESKTOP OPERATING SYSTEMS

ISTS is responsible for supporting desktop images throughout the agency, including those for general purpose users, and several special purpose environments. GAO is currently supporting Windows XP with an integrated suite of productivity software that includes Office 2007, Outlook 2007, Internet Explorer 8, Adobe Acrobat 9, and OpenText DM 5.2.1. GAO also supports special purpose desktop images for the Graphics and Publishing group; Tax audit group; and statistical analysts; each of which has specific software and computing requirements.

GAO intends to migrate all agency desktops to Windows 7 by April of 2014. The contractor shall provide the following support:

- a. Manage the build, maintenance, and patching of each desktop image. Maintenance images will be created on a monthly basis for physical desktops.
- b. Support a mixed environment of virtual and physical desktops.
- c. Ensure that Desktop OS images are fully functional and operate as intended on systems using the Federal Desktop Core Configuration (FDCC). This is based on the latest GAO-approved version of Windows. The standard installation, operation, maintenance, updating, and/or patching of software should not alter the configuration settings from the approved FDCC configuration. The information technology should also use the Windows Installer Service for installation to the default "program files" directory and should be able to silently install and uninstall. Applications designed for normal end users should run in the standard user context without elevated system administration privileges. The contractor shall use Security Content Automation Protocol (SCAP) validated tools with FDCC Scanner capability to certify their products operate correctly with FDCC configurations and do not alter FDCC settings.

C.3.5.5.1.3 DESKTOP APPLICATIONS

ISTS manages around 200 special purpose and limited license applications for the GAO user community. These applications are currently delivered via Novell ZenDesktop application objects, which will transition over to virtual applications as the migration to VDI occurs. Version updates and patches are integrated into application objects, which are Quality Assurance (QA) tested prior to scheduling for delivery to end users.

The contractor shall support the following functions:

- a. Support, develop, maintain, and document GAOs Base Image Build and Deployment procedures.
- b. Provide technical assistance for defining GAO Base Image(s) specifications for in-scope Hardware.
- c. Develop and document detailed technical specifications that define and support the build, test, and deployment plans for the standard GAO Base Image(s).
- d. Build GAO Base Images for in-scope hardware.
- e. Conduct system-level and End-User testing of GAO Base Image(s) to validate that they perform in accordance with the approved specifications and that they can be deployed successfully and operate with all supported applications, hardware and software.
- f. Provide necessary utilities/tools to maintain and ensure compliance with GAO Base Image deployment/management policies and procedures.
- g. Deploy approved GAO Base Image(s) on applicable hardware.
- h. Support and administer standard software distribution tools.
- i. Recreate End-User desktop environments to their previous state including base build plus all End-User-specific features, functions, and applications.
- j. Automate GAO Base Image deployment processes (e.g., remote electronic upgrading of desktop images).

k. Participate in deployment reviews and respond to recommendations and guidance from EOG staff as it relates to process improvement.

C.3.5.5.1.4 REASONABLE ACCOMMODATION/SECTION 508 SUPPORT

The functions to be performed by the contractor under this activity are support for GAO in its GAOIs of achieving compliance with the statutory requirements of Section 508 of the Rehabilitation Act, for access to electronic and information technology (EIT) to persons with disabilities. GAO is required to ensure that its Services and Staff offices' websites, applications, documents, forms, and records are Section 508 compliant. To that end, the contractor shall provide assistance with integrating assistive technology in the form of specification design, compliance testing, validation, verification and/or remediation of websites, and for software applications and documentation in the areas including but not limited to the following:

- a. Software applications and operating systems including commercial off-the-shelf application (COTS).
- b. Web-based intranet and internet information and applications, including support documentation (e.g. PowerPoint presentations, PDFs, etc.).

C.3.5.5.2 <u>DATA CENTER SERVICES</u>

The contractor shall perform the following facility management activities for the data center and test support facilities located at GAO headquarters in Washington DC:

- a. **Communication:** track and report any anomalies noted within the data center and test support center within 10 minutes of discovery. Notifications should be initiated via the Netlog or FrontRange ITSM.
- b. **Monitoring:** monitor servers, UPS, appliances, and peripherals for fluctuations in power, temperature, or other significant operating environment conditions. Staff will be onsite during core business hours to respond to alerts. After hours, and on Federal Holidays, on-call engineers will respond to alerts. The contractor shall also monitor and report unauthorized accesses to the data center or test support facilities.
- c. Coordination: ensure all resources required to address facilities-related issues are identified and available.
- d. **Documentation:** ensure that all of the documentation required to manage the data center (rack-elevation drawings, system shutdown procedures, emergency response procedures, etc.) is up-to-date and readily available to authorized individuals (see **Section J, Attachment MM** and **Section F, Deliverable 38**).

The contractor shall also provide the Government with process improvement and efficiency recommendations and solutions as they relate to capacity planning, preventative maintenance, energy and space efficiency, power, cooling, virtualization, and automation.

GAO utilizes APC Infrastructure Management solutions to control and monitor power in the data center and in the event of an extended power outage to enable automated server shutdown. Devices such as individual branch circuits, temperature data points, transfer switches, cooling

devices, and UPS are managed and monitored at the rack level. Power failures and elevated temperatures are examples of events that if not addressed impact network availability. Timely information allows corrective action to be taken before equipment is damaged or fails and is critical to a smooth data center operation. Incidents are transmitted to engineers through alerts generated by HP OpenView or Nagios. At a minimum the contractor shall provide the following facility management support:

- a. Install, configure, and manage software and devices that monitor the data center environment.
- b. Install, configure, and manage UPS monitoring devices.
- c. Monitor environmental issues such as heat, humidity, and air conditioning taking corrective actions when appropriate.
- d. Daily system availability checks for power, batteries, environment, and security systems.
 - 1. Power (UPS)

The contractor shall conduct site surveys to assess site needs for electrical power requirements and analyze hardware power requirements as well as HVAC effects prior to upgrades and new equipment installs. The contractor shall ensure that they perform server power load balancing as equally as possible among each of the power phases on the three-phase PDU's.

2. HVAC

The contractor shall monitor the temperature of the LAN Operations Center (aka the Data Center) and LAB's via the APC and other facilities-related monitoring and reporting systems and report suspected malfunctions or high temperature concerns to building facilities services.

- 3. Space/Rack
 - The contractor shall conduct site surveys of each server rack prior to installing a server and verify that the rack has the necessary room, power, cooling and peripheral support required.
- 4. Cabling

The contractor shall adhere to existing cabling standards and use color-coded patch cords in the LOC when patching servers and patch panels.

C.3.5.5.3 SERVER APPLIANCE SERVICES

This service area provides engineering-related support for the server/appliance related operations and maintenance support services. The contractor shall perform the following:

- a. Recommend engineering requirements and policies related to System Change Request (SCR) related activities.
- b. Develop, document, and maintain in the SOPs, engineering procedures that meet requirements and adhere to defined policies.
- c. Develop and deliver engineering plans related to SCRs.
- d. Perform engineering functions required to implement design plans for SCRs.
- e. Perform engineering functions required to implement and manage components related to SCRs

- f. Manage SCR-related engineering efforts using established project management tools and methodologies.
- g. Maintain software release matrices across development, QA, and production environments and networks.
- h. Evaluate all new and upgraded service components or services associated with SCRs for compliance with ISTS security policies, regulations, and procedures.
- i. Assess and communicate the overall impact and potential risk to service components prior to testing completion.
- j. Conduct integration and security testing for all new and upgraded equipment, networks, software or services to include unit, system, integration and regression testing based on requirements defined in SCRs.
- k. Stage new and upgraded equipment, software or services to smoothly transition into the existing environment based on requirements-defined SCRs.
- 1. Perform configuration management and change management activities related to integration and testing of SCR-related systems or services.

C.3.5.5.4 OPERATING SYSTEM SERVICES

The support provided under this service area shall include routine and emergency changes to the Linux, Microsoft, and Novell operating environments based on EOG priorities to ensure production and non-production systems remain operational and available to GAO users. The contractor shall maintain the current environment (operating systems levels, servers) and provide recommendations for software version levels and hardware capacity. There is no current SOP for providing these recommendations, but the contractor shall consult with GAO personnel on such recommendations. Operating system services include those systems that involve GAO supported Internet/Intranet services. Core OS services are related to systems administration, troubleshooting, reconfiguration, and capacity analysis for the OS platforms defined below in the production, QA, test, and development enclaves. The following is a list of tools used to support the current operating system environment:

- a. **Linux RedHat** GAO supports multiple versions of RedHat within the production, QA, test, and development enclaves. The Linux environment also includes the use of cobbler and puppet to build and maintain a standard build environment. At the current time there is no plan to move off of RedHat.
- b. Microsoft Windows The GAO environment currently supports a Windows 2003 and Windows 2008 environment. Security and other OS related patches are managed through a WSUS deployment infrastructure. At the current time there is no plan to migrate from the Microsoft Windows platform.
- c. **Novell -** The current Novell infrastructure consists of eDirectory 8.7.3 and Netware 6.5. This operating environment is being phased out and is not expected to be supported beyond the first six months of the TO's base period. The primary purpose of this environment is to support the desktop management platform (ZEN Configuration Manager).

C.3.5.5.5 <u>VIRTUALIZATION INFRASTRUCTURE SERVICES</u>

The contractor shall support virtualization infrastructure services using the following tools:

- a. VMWare Vsphere GAO is in process of implementing a virtualization infrastructure for the headquarters data center that will be hosted on HP hardware running the vSphere ESXi 5.1 hypervisor. The virtualized infrastructure will be managed using tools associated with the VMware and Solarwinds management suites.
- b. Virtual Desktop GAO is undertaking an effort to provide a VDI using Virtual Desktop. The VDI environment will deliver a Windows 7 corporate image that includes integrated desktop software, including but not limited to Microsoft Office 2010, Outlook 2012, Adobe Acrobat 10, and OpenText DM 5.3. The Virtual Desktop environment utilizes a provisioning service to provide virtual disk streaming. GAO anticipates requiring 5 golden desktop images. The contractor shall update the desktop engineering documentation (see Section F, Deliverable 42). GAO's refresh cycles will change as a result of the VDI effort. The current model for technical refreshes is driven by new technical requirements that dictate changes in equipment. Once VDI is in place, the model for notebook replacements, servers, and telecom equipment will be more defined.
- c. **Virtual Applications** GAO plans to transition desktop applications that will not be included in the base Desktop image(s) to a virtual application environment. GAO intends to use this for special purpose user groups (such as data analysts and graphics/publishing) and limited licensing applications. These applications will be delivered via the VDI environment, and be presented to users in conjunction with their virtual desktop. GAO anticipates needing up to 10 desktop images for the delivery of special purpose applications to targeted user groups.

C.3.5.5.6 STORAGE SERVICES

The period of performance for support of the EMC NS960 ends during the life of the TO. The contractor shall manage the storage solutions and provide technical input for acquiring the storage solutions and manage allocation of storage and replication of data via storage technologies. The Government anticipates reevaluating its enterprise storage solution during the life of the TO.

ISTS currently supports the following storage components:

- a. EMC NS 960 The EMC NS960 consists of the Clariion and Celerra components of the EMC line, using iSCSI for server to SAN protocol and mainly CIFS as a NAS protocol (although NFS is used). The storage solution uses EMC's Recoverpoint to copy SAN data from the HQ NS960 to the ACF NS960. The storage solution uses EMC's Celerra Replicator to copy NAS data from the HQ NS960 to the ACF NS960.
- b. EMC NX4 Currently, each FO uses an NX4 as SAN storage for Oracle and Exchange 2007 and NAS storage for files. GAO will move to Exchange 2010 by April 2014. The storage solution uses EMC's Celerra Replicator and Replication Manager to copy data from the FO NX4s to the ACF NS960.
- c. HP Modular Storage Arrays Modular Storage Arrays are used as direct attached storage for temporary solutions with large storage needs.

C.3.5.5.7 REMOTE ACCESS SERVICES – VPN SUPPORT

GAO uses a client-based software called Network Connect to allow users to authenticate via Juniper VPN devices and mount their GAO-issued notebook computer to the production network while working remotely. This capability provides production network capabilities to GAO's teleworkers while working on a non-GAO internet connection. This software also utilizes a script to authenticate to Novell to ensure the download of Novell delivered application objects and security patches. Network Connect is restricted for use on a GAO notebook only. Security rules on the portal, will deny access to non-GAO notebooks attempting to connect through Network Connect. All non-GAO computers are required to access GAO resources through the Web Portal. GAO's enterprise telework policy (for GAO HQ and field offices) allows for certain amounts of both occasional and regularly scheduled telework. Currently, the field offices have expanded this policy and those employees are encouraged to telework 50 percent of the time.

Remote Access Services Support - The remote access interface (e.g. GAO Remote Access Portal) is divided into two components. The first component consists of web links to intranet applications such as e-mail, WebTA, the intranet home page and the like. For these web links to work, the Juniper VPN concentrator provides a secure socket layer (SSL) connection with two factor authentication and serves up the web page. In addition, JAVA is used to connect to the aforementioned applications via the remote access web interface. JAVA is used to ensure applications will run on many different kinds of computers including PC and Macintosh running various operating systems and web browsers.

The second component of the remote access interface is GAO's remote desktop services. The remote desktop provides users with a choice for whether they are connected from a Microsoft operating system or a Linux or Apple operating system. Microsoft-based home computers utilize Terminal Services to access a hosted-shared Windows XP GAO desktop. Apple or Linux-based home computers utilize Citrix Presentation Server 4.5 to access a hosted-shared Windows XP GAO desktop.

All external access to GAO systems is through VPN.

C.3.5.5.8 DATABASE SERVICES

ISTS provides centrally managed database administration services. Database Administrators are responsible for providing a stable, compliant infrastructure for all in-house application services. ISTS currently supports 13 pre-production Oracle Servers, 28 production Oracle Servers, 7 continuity Oracle Servers, 6 production MS SQL Servers, and 2 continuity MS SQL Servers. The Database Administration team supports legacy applications that have typically used Oracle (COTS) or MySQL (Web) for development purposes and MS SQL (OTS) for many commercially available products.

Specific tools used to support Database Services include:

- 1. Oracle Database Enterprise Edition (11g).
- 2. Oracle Grid Control.
- 3. Oracle Database Diagnostics Pack.

- 4. Oracle Database Tuning Pack.
- 5. Embarcadero Rapid SQL.
- 6. Quest TOAD.
- 7. MS SQL Developer.
- 8. MS SQL 2005.
- 9. MS SQL 2008.
- 10. MySQL.

Databases are monitored, maintained, and backed up by the Database Administration Team. Oracle RMAN is used for backups which are run every evening at 8:45. Oracle Dataguard is used to replicate servers to the continuity servers at the ACF. MS SQL replicates to the continuity servers at the ACF.

The contractor shall provide the following Database Administration support:

- 1. Create, manage, monitor databases.
- 2. Maintain the MS SQL Cluster server implementation.
- 3. Deliver specific quarterly reports (see Section F, Deliverable 23) based on database monitoring for compliance and oversight purposes (see Section J, Attachment KK for the template for the Quarterly Report).
- 4. Perform monthly maintenance per approved schedule, outside of normal business hours (currently third Saturday of the month and sometimes Sunday).
- 5. Perform twice annual password change process.
- 6. Perform quarterly database patch process.
- 7. Monitor the database support helpdesk queue.
- 8. Maintain task listing for project and operational support.
- 9. Maintain standard set of monitoring metrics on database status, security, auditing, and performance.

C.3.5.5.9 BACKUP AND RESTORATION SERVICES

The contractor shall provide "backup services" to replicate and restore data to tape in support of GAO continuity requirements. Infrastructure used to provide that support include:

- a. Symantec Netbackup The Symantec Netbackup infrastructure is used to perform backups of systems to tape at HQ. All data residing on FO NX4 and servers is backed up to tape with FO local tape drives. All data residing on the HQ SAN (after being replicated to the ACF by the EMC Recoverpoint appliances) is backed up to tape at the ACF. All data residing on the HQ NAS (after being replicated to the ACF by EMC Celerra Replicator) is backed up to tape at the ACF using the Netbackup NDMP option.
- b. Quantum Scalar i500 Tape Libraries Two Quantum Scalar i500 tape libraries are used. One at HQ, used to back up the HQ Exchange infrastructure and to perform restorations of LTO5 tapes. The other is at the ACF, used to send all the replicated EMC NS960 SAN/NAS to tape.

Backup 'jobs' are coordinated after business hours and include incremental Monday through Thursday and weekly full backups on Friday nights. Backup tapes are rotated to an off-site service monthly.

C.3.5.5.10 DOCUMENT AND RECORDS MANAGEMENT SERVICES

The GAO uses a Document and Records Management solution to provide document and record control services to staff. The solution uses OpenText DM5 with an Oracle 11g database and custom OpenText coding. Support of the OpenText infrastructure involves support for resolving customers' problems with client server applications and OpenText DM5, modifying or deleting data in database tables when necessary, or resetting system codes to allow users access to needed records. Common troubleshooting of OpenText DM5 issues involve users rights to libraries, archival of documents, integration with MS Office products, and the technical design of GAO's OpenText DM 5 implementation.

Specific tools used to support Document Management include:

- 1. OpenText DM5.
- 2. OpenText RM Administration Tool.
- 3. OpenText (GAO custom) File Plan Replication tool.
- 4. Embarcadero SQL.
- 5. JRB Utilities.
- 6. Programmer's File.
- 7. MS Visual Studio.
- 8. Ztreewin.
- 9. AppSightSystem.
- 10. Black Box (Docsfusion diagnostics).

The contractor shall provide the following DM5 /Oracle Database Administration support:

- 1. Create and manage DM users and groups.
- 2. Perform maintenance tasks such as data archival, and performance fine-tuning.
- 3. Perform standard monthly maintenance activities.
- 4. Check DMServer Report.
- 5. Check Hback Report.
- 6. Deliver standard reports to functional groups, including:
 - a. File Contents Report RM.
 - b. Job Code Content Report RM.
 - c. Benchmark Report.
 - d. Applications Support Daily Report (status report on DM Systems).
- 7. Provide Document Management specific Disaster Recovery and COOP support, specifically:
 - 1. Maintain the Document Management Architecture at ACF ensuring the design configuration will support GAO in the event of a DR or COOP event for both HQ and FOs.

2. Enable GAO staff to access their documents in the event of a DR or COOP event. Provide support at annual DR/COOP exercises.

C.3.5.5.11 MESSAGING SERVICES

The contractor shall operate, maintain, and administer email and messaging services such as Outlook, Blackberry Enterprise Servers (BES), Good Technology, and RPost. Messaging services support provides management of all mail servers across the GAO network for Headquarters, 11 Field Offices and the ACF.

Specific tools used to support Messaging Services include:

- 1. Microsoft Exchange.
- 2. Microsoft Outlook.
- 3. Blackberry Enterprise Server (BES).
- 4. Good Technology.
- 5. RPost Registered Email.
- 6. Quest Spotlight on Messaging.
- 7. Quest Message Stats.
- 8. Quest Archive Manager.
- 9. TrendMicro Virus Scan.
- 10. Anti-Malware.

The contractor shall provide the following Messaging Services support:

- 1. Report Monthly Statistics (see **Section F, Deliverable 34**) on incoming and outgoing mail from GAO using Outlook and Microsoft Exchange following implementation.
- 2. Perform weekly and monthly maintenance on all servers.
- 3. Perform email restoration functions via backup tapes.
- 4. Create/delete email accounts.
- 5. Create/delete mailing lists.
- 6. Process all email held in spam quarantine areas.
- 7. Provide status updates/reports to senior management as requested.
- 8. Email Restores.
- 9. CAPNET email support.
- 10. License Management.
- 11. Incident Support.
- 12. Management of BES.
- 13. Account creation/deletion.
- 14. Device configuration/initialization
- 15. Support for trouble calls relating to Blackberry service.
- 16. Provide Messaging Services for specific Disaster Recovery and COOP support, specifically:
 - 1. Maintain Messaging Architecture at ACF ensuring the design configuration will support GAO in the event of a DR or COOP event for both HQ and FOs.
 - 2. Provide GAO staff with access to their email in the event of a DR or COOP event.

3. Provide support at annual DR/COOP exercises.

C.3.5.5.12 <u>TELECOMMUNICATIONS NETWORK INFRASTRUCTURE AND SERVICES</u>

The contractor shall provide oversight, coordination, support, and maintenance for Government Furnished Services (GFS) and infrastructure assets. These services include components which are physical devices, applications, and technical tools, i.e. Government Furnished Property (GFP) that are connected to GAO's network and covered by third party maintenance agreements, e.g., Cisco SMARTNET. Several telecommunication services are provided by third-party service providers and under these circumstances, the contractor shall be GAO's liaison to the applicable service provider and ensure operational activities are achieved. The liaison acts on behalf of the Government during diagnostics in a technician to technician type of relationship. The services and activities apply to the equipment and services listed in **Section J**, **Attachment W**.

Telecommunications include the following areas:

- a. Networking (e.g. LAN, WAN, MAN, Internet, WLAN, and other agency networks such as CAPNET, House, and Senate connections at GAO HQ).
- b. Video (IP/TV, Cable TV, VTC, Web Conferencing).
- c. Mobility (Enterprise smartphone/mobile device gateways and applications).
- d. Security (Policies, Guidelines, Security Plans, Settings, Passwords, etc.)

C.3.5.5.12.1 ACTIVITIES

The contractor shall provide the following operational activities associated with telecommunication network infrastructure and services. The contractor shall update the telecommunication SOPs as changes in the process occur. The contractor shall also conduct a semi-annual review of the SOPs for accuracy (see Section F, Deliverable 37).

- a. Monitoring and Reporting for continued performance:
 - 1. Collect and correlate network alerts and SNMP data feeds that provide GAO with GFP equipment and services information to include third-party services as applicable.
 - 2. Proactively detect problems, respond to alerts and promptly report anomalies that adversely affect telecommunication services and quality.
 - 3. Provide notification of alarms, anomalies, and service interruptions.
 - 4. Monitor availability of infrastructure, applications, and services.
- b. Configuration Management:
 - 1. Regularly perform equipment configuration backups, in order to ensure the availability of recent configuration data for restoration purposes.
 - 2. Provide GAO access to backup logs and configuration information as defined by standard operating procedures.

- 3. Ensure all configuration activities, manual or automated, are executed.
- 4. Configure Government Furnished Property (GFP) VTC equipment to interface with other Government agencies, universities, civilian businesses, foreign bureaus, and telephone companies to facilitate interoperability with GAO's private network, applications, and services.
- c. Maintenance: Performed as necessary and defined by the Government's advanced operations team to include security patches and upgrades. The contractor shall follow the change review board process to receive approval to execute maintenance. Maintenance activities shall be executed to accomplish the following:
 - 1. Remedial maintenance: Result of an operational anomaly to restore normal operating conditions.
 - 2. Preventative maintenance: Predetermined intervals or criteria to reduce risk of failure or performance degradation of the infrastructure, applications, tools, and services.
 - 3. Routine maintenance: Small-scale activities (usually requiring only minimal skills or training) associated with regular (daily, weekly, monthly, etc.) and general upkeep. This maintenance ensures the infrastructure and services are kept in good condition, are secure, and provide a long operating life.
- d. Installation and Implementation: Perform Operational Upgrades and Break/Fix activities associated with hardware, software, and applications to include but not limited to rack/cable installation and device/application configurations and patches delivered by the advanced operations team.
- e. Account Management: Create, to include assignment of privilege levels approved the GAO, and deactivate user application accounts associated with applications and management tools.
- f. Performance Monitoring and Measurement: Monitor system/application performance, report the results, and escalate problems when they occur to include near real time and historical statistics. Report Performance Information (see **Section F, Deliverable 36**) including equipment data; availability, throughput and delay statistics; and application-level network thresholds, real-time analysis, and trending reports.
- g. Security: Escalate known and/or perceived security events, faults, and violations of access control(s) and configuration policies to security operations.
- h. Root Cause Analysis: Provide Root Cause Analysis (see Section F, Deliverable 36) to identify the root causes of faults, problems, and incidents that result in system/service failures, outages, or degradation of performance. Root cause analysis shall be documented IAW SOPs.

C.3.5.5.12.2 VOICE SERVICES

Voice/telephony services and applications are provided by a third-party service provider; therefore operations and engineering for voice services will not be performed under this task

order. However, the contractor shall escalate operational requests, problems, and/or incidents to the ISTS Telecommunications Service Operations Center (TSOC) using FrontRange ITSM.

C.3.5.5.12.3 <u>VIDEO INFRASTRUCTURE AND SERVICES</u>

The contractor shall operate and maintain the video infrastructure/services described below:

- a. Internet Protocol Television (IPTV): IPTV consists of a windows media platform that is accessed via Microsoft Internet Explorer (IE) web browser interface. GAO's IP/TV application delivers Live Broadcasts from GAO's video studio, Pre-Recorded Program Content (e.g. On-Demand), and select Cable TV (CATV) channels.
- b. Video Teleconferencing (VTC) services and infrastructure consists of multi-vendor VTC coders/decoders (e.g. codecs), VTC display monitors, cameras, and microphones that are installed in dedicated meeting rooms within GAO locations (e.g. HQ and FOs). Supplemental audio conference bridge services are provided to participants joining VTC meetings remotely. VTC services include but are not limited to:
 - 1. Point-to-Point (GAO VTC room to GAO VTC room).
 - 2. Multi-Point (up to six GAO VTC rooms using VTC Codec More than Six VTC).
 - 3. Rooms using external hosted (third-party) Multi-Point Conference Unit (MCU) VTC bridge.
 - 4. OffNet One or many GAO VTC rooms connecting to external VTC systems (e.g. Government Agencies, Universities, Civilian businesses, Foreign bureaus) via external hosted (third-party) Multi-Point Conference Unit (MCU) VTC bridge.
 - 5. Secure VTC VTC System/Room which connects to a classified network IAW secure VTC policies established by the Department of Defense (DOD).
 - 6. IP/TV Relay VTC codec connects to IP/TV which streams/broadcast VTC video. IP/TV participants utilize audio phone bridge to receive voice.

The contractor shall provide a monthly report containing the following VTC usage data (see **Section F, Deliverable 50**):

- Monthly number of VTC hours with a breakdown of IP vs. ISDN, keeping a running total year over year
- Monthly number of VTC conferences with a breakdown of whether multipoint, point-topoint, off-network, or third party connection, keeping a running total year over year
- Monthly number of VTC hours by each team/business unit, keeping a running total year over year
- Monthly number of VTC conferences by team/business unit, keeping a running total year over year
- Monthly number of VTC hours by room, including all HQ, Field offices, and Secure VTC rooms, keeping a running total year over year
- Monthly number of VTC conferences by room, including all HQ, Field offices, and Secure VTC rooms, keeping a running total year over year
- Monthly number of VTC requests and cancellations

GAO is in the process of phasing out permanent VTC in support of a cloud based VTC such as WebEX.

- c. Cable TV (CATV): There are multi-vendor signal distribution CATV systems at each GAO location (e.g. HQ and FOs). GAO's CATV signal provider equipment are received via delivery points (antennas and cable feeds); and GAO's cable television service entrance cable infrastructure within each GAO location. Select CATV channels are distributed to Television (TV) sets within conference rooms/offices and local IP/TV broadcast servers that broadcast said channels to users on the Local Area Network (LAN) at each of the GAO locations (e.g. HQ and FOs).
- d. Web Conferencing: Web conferencing delivers video and collaboration capabilities to GAO via a web browser interface. The web conferencing service/application is externally hosted and managed by a third-party service contract. The contractor shall act as liaison on GAO's behalf to contact the web conferencing provider during service outages and/or to troubleshoot and resolve issues.

C.3.5.5.13 <u>IDENTITY AND ACCESS SERVICES</u>

The contractor shall operate, maintain, and administer GAO's enterprise directory services, currently provided through Microsoft Active Directory. Active Directory provides a common management interface throughout the network for all users, servers, applications, and services. These services include network authentication, user administration, file and print sharing, network restrictions, permissions and policies, messaging, Internet and intranet applications, and desktop applications and distribution. The contractor shall provide the following types of director services support:

- a. Develop Directory Services tree structure.
- b. Manage Health of Directory Services.
- c. Deploy Directory Services upgrades.
- d. Troubleshoot Directory Services problems.
- e. Develop and maintain Directory Services documentation.
- f. Set standards for file and object rights.
- g. Manipulate file and object rights.

C.3.5.5.14 RESERVED

C.3.5.5.15 TESTING

C.3.5.5.15.1 TESTING ENVIRONMENT

The test environment is used to test patches, application objects, new hardware and software releases, and other IT related services prior to releasing them into the production environment. The test environment consists of hardware, software, and applications that closely mimic the

production services supported by the ISTS organization. The test environment consists of three test labs: (1) Development, (2) Test, and (3) Quality Assurance.

Development Lab:

- a. Provides working environments for development of all applications (new, upgrades, etc.)
 - 1. Coldfusion, Java, and HTML development
 - 2. Development of Web applications.
 - 3. The JBoss Application server is hosted in the Devlab and provides working space for Java as well as Oracle developers.
 - 4. Open source application testing using Lamp Stack (Apache, MySQL, and Linux) is also provided in this Development Environment.
 - 5. All standard GAO applications
 - 6. Research and development of VMWare virtual server environment and administration.

b. Test Lab:

- 1. The test lab is an isolated, off-network, environment housing a replica of GAO's Active Directory infrastructure, intended for the purpose of testing technologies prior to production deployment.
- 2. The objectives of the test lab are to:
 - A. Build and maintain an environment that is as close to production configuration as possible; so that technology may be tested and moved into production without having to manually rebuild or reconfigure.
 - B. Develop and test hardening guidelines/standards for new technologies prior to production implementation.
 - C. Provide a platform to test network services such as upgrades to GAO's Exchange and document management enterprise services.
 - D. Provide a platform to test applications that authenticate to AD.
 - E. Provide a platform to test Linux mounts.

3. The test lab also accommodates:

- A. Develop and testing of new server images for GAO standard server builds for Windows.
- B. Research and Development of virtual server environment and administration.

c. Quality Assurance Lab

- 1. Final test and verification of application/software/IT product's functionality based on requirements and testing standards.
- 2. QA testing is performed in a test environment that closely mimics the GAO production and workstation infrastructure.
- 3. The QA Lab is managed by QA Manager

The Contractor shall maintain and use these test environments, and perform all test and integration/release support and deployment activities. The contractor shall ensure that all activities associated with release and deployment support services are approved by the Government prior to movement from the deployment and test labs to the production

environment. Approvals are obtained through the formal change and release management processes. See Section J, Attachment FF for ISTS Quality Assurance procedures.

The contractor shall maintain and use the GAO test environments as part of release and deployment support. The contractor shall perform all test and integration/release support and deployment activities using the test, integration, and development environments provided by the Government at GAO Headquarters. See **Section J, Attachment FF** for ISTS' Quality Assurance procedures.

C.3.5.5.15.2 AUTOMATED TESTING

GAO currently uses Quality Center (QC) and its Functional Testing module to perform testing and manage end-to-end application / system testing. This is facilitated by the TOSCA Test Suite. The contractor shall use an automated testing software application to perform and manage end-to-end application/system testing for enhancements falling under the O&M support of this TO.

The QC suite has multiple modules and works alongside the application Functional Testing (code-driven test automation tool). The modules are: (1) Requirements, (2) Test Plan, (3) Test Lab, and (4) Defects. The contractor shall use Functional Testing to record / emulate tester actions to be run for regression testing. The code generated and objects captured for the application are stored in the QC repository and mapped logically to the requirements and test cases. GAO also conducts test activities using this suite of automated tools to provide a repeatable process for gathering requirements, planning and scheduling tests, analyzing results, and managing defects and issues. The contractor shall use these tools in the performance of this support. At a minimum the contractor shall provide the following under the test center support effort:

- a. Server maintenance.
- b. Test script writing.
- c. Testing.
- d. Account creation.
- e. Customer Support.
- f. Troubleshooting.
- g. Maintain test lab (hardware and software) set up, configuration, upgrades, and diagnostics.
- h. Documentation and maintenance for test lab components, systems, policies, and procedures.
- i. Monitor network operations for possible impacts on test lab.
- j. Maintain a mirror infrastructure for the test lab.
- k. Backup/Restore of network file(s).
- 1. Network utility software testing.
- m. Compatibility testing. (Testing to determine if software is compatible with other elements of a system with which it should operate, e.g. browsers, Operating Systems, or hardware.)
- n. Performance testing.
- o. Creation and maintenance of test accounts.
- p. Provide technical support in preparation for and during testing periods.
- q. Technical support for the operation and maintenance of a test automation application.

r. Problem resolution related to the test lab and products in testing.

C.3.5.5.16 SOFTWARE RETIREMENT SUPPORT

The Enterprise Software Removal (ESR) Team (Government and contractor personnel) handles all requests to remove any type of software from the GAO network that has outlived its usefulness, is outdated, or otherwise is no longer in use.

The contractor shall provide the following Software Retirement support at a minimum.

- a. Manage all requests to remove any type of software from the GAO network that has outlived its usefulness, is outdated, or otherwise no longer in use. Examples are: applications, databases, test and Quality Assurance instances, development instances, applets, cron scheduled jobs, automated scripts.
- b. Serve on the Enterprise Software Removal Team that coordinates with appropriate stakeholders to evaluate the system to identify all components that need to be addressed in the retirement process.
- c. Track and manage all removal activities in each of the four removal phases:
 - 1. Preparation Phase.
 - 2. Acceptance Phase.
 - 3. Inaccessible Phase.
 - 4. Removal Phase.
- d. Manage and maintain documentation for the process including a visual representation of these phases in the form of a Software Removal Map, tracking them using the FrontRange ITSM tool, and providing records retention where indicated.
- e. Coordinate with the GAO Software Retirement Owner.

C.3.5.17 GAO WEB CONTENT AND PRODUCT METADATA MANAGEMENT, DISTRIBUTION AND PUBLISHING SERVICES

GAO's web content plays a significant role in supporting GAO's mission of informing the Congress and the American people. The web content includes GAO's Internet and intranet sites, web services and applications, special content areas on its Internet site that offer users improved access to bodies of work, and GAO products and their metadata. GAO uses information management services to maintain and manage the product metadata describing GAO's internal and external products. The product metadata is GAO's comprehensive corporate memory, and it resides in interacting product and content databases including the Product Metadata Repository (PMR) and the Publications Database. Some of these databases will likely be replaced or retired over the course of this TO.

GAO seeks to provide its internal and external audiences with the best possible service in terms of information accuracy, timeliness, usability, and accessibility. The product metadata is critical to the accurate and timely distribution of GAO products to Congressional clients, Federal agencies, and the public, as well as to the display, search and navigation results on GAO's public website, www.gao.gov. To the extent feasible, GAO ensures that its external and internal web content is Section 508 compliant.

GAO publishes almost all products as PDFs, and some products have related electronic supplements (e-supplements) published as PDF or HTML. GAO maintains product quality and product branding through tools and processes designed to maintain standards and minimize errors and expense during the publishing process. GAO's main distribution method is electronic. GAO issues about 1,500 products per year. GAO uses FrontRange ITSM to track tasks and ensure completion.

In addition to requirements in the remainder of this section, the contractor shall:

- a. Continue to support GAO's data as systems are upgraded, replaced, or retired.
- b. Maintain current and complete documentation for databases and processes using GAO's document management system DM.
- c. Recommend modifications to improve operational efficiency and effectiveness in the areas described in this section.
- d. Be available for face-to-face meetings in GAO Headquarters on a daily basis.

GAO will provide standard cubicle and office space equipped with computer equipment appropriate to the task being performed.

C.3.5.17.1 INFORMATION MANAGEMENT SERVICES

a. Overview

GAO uses information management services to maintain and manage its comprehensive corporate memory of interacting product and content databases (including the Product Metadata Repository (PMR) and the Publications Database) containing product metadata describing GAO's internal and external products. The metadata is critical to the accurate and timely distribution of GAO products to Congressional clients, Federal agencies and the public. It is also critical to the display, search and navigation results on GAO's public website. GAO's internal and external products may consist of audit reports (including chapter reports, letter reports, and numbered correspondence), decisions, testimonies, and other products, including Inspector General products and internal work-related documents, such as memos and audit work papers. These products may be in hard copy (paper or microfiche) or electronic files. The needed product metadata varies among product types and must be entered in multiple internal systems including the Product Metadata Repository (PMR) and the Publications Database.

b. Background and Context

The following is background information concerning interacting product and content databases, in addition to the PMR and the Publications Database:

1. **GAO Thesaurus** - One metadata source for products is the GAO Thesaurus, a controlled vocabulary consisting of approximately 13,396 preferred/non-preferred terms (currently 7,783 preferred terms). These terms are assigned to individual products to facilitate the retrieval of these products in a variety of applications, including internal and external

searching. The Thesaurus is structured to identify hierarchical relationships among terms and to indicate cross-references to and from related terms. Definitions and/or scope notes are provided where appropriate.

GAO uses COTS software, Multites Pro, to support entry of new thesaurus terms and to establish term relationships. The software enables the ANSI/NISO-compliant creation and maintenance of a full taxonomy and can be used to develop a custom vocabulary or as a tool to import from external sources.

2. **GAO Corporate Taxonomy** - For GAO's purposes, a corporate taxonomy is a hierarchy of categories used to classify documents and other information to represent the information available within the enterprise. GAO's corporate taxonomy is applied across different applications including, but not limited to, the GAO Product Metadata Repository, document management/Electronic Records Management System, GAO's intranet and Internet web pages, and other legacy systems, as well as new systems as they are developed.

GAO uses the SAS Content Categorization Studio for taxonomy management in addition to Microsoft Excel.

- 3. **Recommendations Follow-up** GAO tracks and records the actions of agencies and the Congress in response to GAO report recommendations in the Recommendations Follow-up System. The data are the source for the Status of Open Recommendations search application as well as product-by-product listings of recommendations and their status and other related information available on GAO's external website.
- 4. **USOrg Database** This GAO database contains current Congressional Member and staff names and addresses, names of Federal agencies, name/address information of heads of Federal departments and agencies and non-Federal entities based on authoritative sources defined by GAO, including Leadership Directories and cq.com. This database is accessed by GAO-wide applications requiring Congressional and other information. The accuracy of Congressional names and addresses is very important to GAO because Congress is GAO's primary client. The USOrg Database in written in Oracle and the data entry program is written in Java. The following applications access the database:
 - A. Publications Database System.
 - B. Product Metadata Repository.
 - C. Accomplishment Reporting System.
 - D. Product Distribution (Form 115 see Section J, Attachment P).
 - E. Recommendations Follow-up System.
 - F. Distribution Workflow (labels).
 - G. Congressional Contact System.
- c. **Requirements:** The contractor shall:

- 1. Create and maintain accurate product metadata, including GAO Thesaurus and Taxonomy terms and categories, Congressional names and addresses, names of Federal agencies, and name and address information of heads of Federal departments and agencies and non-Federal entities, in required system(s) for GAO-supplied source products within GAO-specified timeframes. In support of this requirement the contractor shall provide the following support (at a minimum) in order to ensure accurate product metadata is created and maintained:
 - A. Data entry and quality assurance for the creation and maintenance of records in the Product Metadata Repository and other existing databases. For details related to common product types, see **Section J**, **Attachments RR** (Procedures for Letter Report), **SS** (Procedures for Testimony), and **QQ** (Procedures for Bid Protest Decision). For details on the workflow, see **Section J**, **Attachment PP**, (Report Processing Workflow Example Performed by Information Management)
 - B. Complete all required data entry for a product within defined times (see **Section J**, **Attachment E** SAMs). This information will be entered in stages defined by GAO to support varying publishing timeframes.
 - C. Notify the appropriate Technical Monitor (TM) when needed metadata is either missing or incorrect and update as appropriate.
 - D. Find missing products or resolve product metadata inconsistencies or other issues—for example, contact GAO designated staff to provide the required PDF file.
 - E. Report to the TM on any errors in the posting process (e.g., involving metadata, timing, or missing files) as they occur.
 - F. Maintain systems related to tracking and reporting on GAO's report recommendations (see **Section J, Attachment WW** Form 66 section of Information Management SOP (138864)).
 - G. Operate, maintain and update USOrg:
 - i. Access, add to, or modify recipient name/address and mailing list records, in accordance with GAO-defined procedures; for example, updating address information for Congress and Heads of Federal Agencies as soon as changes become known, based on established procedures and sources (see **Section J**, **Attachment WW**, US Org Process section of Information Management SOP (138864)).
 - ii. Ensure that all address information conforms to U.S. Postal Service (USPS) regulations which may change over the life of the task order.
- 2. Maintain and update the GAO Thesaurus and the GAO Corporate Taxonomy. In support of this requirement the contractor shall provide the following support at a minimum:
 - A. Use a controlled vocabulary from the existing GAO Thesaurus to describe the topical focus of individual products (see **Section J, Attachment WW** PMR section of Information Management SOP (138864)).
 - B. Maintain and expand the GAO Thesaurus as needed or warranted to facilitate topical access to GAO products and ensure that thesaurus changes are reflected in the product metadata management systems and repositories defined by GAO (see **Section J, Attachment WW** Taxonomy section of Information Management SOP (138864)).

- C. Maintain, develop, and expand GAO's corporate taxonomy using previously acquired software tools including, but not limited to, the creation and simple editing and design of a taxonomy structure, the automatic identification of categories, inclusion of thesaurus terms from other agencies and organizations and other appropriate external thesauri, as well as the assignment of content to the relevant classes (see **Section J**, **Attachment WW** Taxonomy section of Information Management SOP (138864)).
- D. Manipulate the taxonomy to provide reports and specialized lists, or other output methods as directed by GAO (see **Section J, Attachment WW** Taxonomy section of Information Management SOP (138864)).
- E. Expand the taxonomy to include sub-topics and GAO products that are currently not included, such as decisions and other legal products (see **Section J, Attachment WW** Taxonomy section of Information Management SOP (138864)).
- 3. Provide an Information Management Weekly Report (see Section F, Deliverable 49),

C.3.5.17.2 SECTION 508 SERVICES

a. Overview

To the extent feasible, GAO ensures that its website and products on its external and internal websites are Section 508 compliant. Section 508 requires that Federal agencies' electronic and information technology are accessible to people with disabilities. GAO follows the spirit of Section 508 of the Rehabilitation Act of 1973, as amended in 1998, by converting all publications to accessible text formats (e.g., ASCII and HTML) that are accessible to screen readers used by the blind. There is an average of about 65 audit publications issued monthly requiring accessible text conversion.

GAO is investigating alternative approaches to create 508-accessible content. Considerations include, but are not limited to, purchasing an off-the-shelf software tool to adapt PDFs to compliant 508 standards, and creating 508-accessible content directly from XML-tagged content. GAO intends, over the course of this TO, to improve the workflow process and the output.

- b. **Requirements:** The contractor shall provide the following support at a minimum:
 - 1. Create accessible text files from (a) a combination of the source files used to create the PDF files posted on GAO's external and internal websites and (b) information in the publications database, utilizing Government-supplied scripts run against the Word, FrameMaker, and InDesign input files to reformat them appropriately. Software includes Word 2007, Adobe FrameMaker v.7 with FrameScript macros (see **Section J**, **Attachment WW** Accessible Text section of Information Management SOP (138864)).
 - 2. Ensure that GAO's internal and external web-based resources (including GAO's Internet and intranet sites, web services and applications) are accessible (see **Section J**, **Attachment BBB** Web Ops SOP (2258764)).
 - 3. Provide Section 508 product processing maintenance and support services including processing files for use by screen readers. In support of this activity the contractor shall:

- A. Test websites and products with various web Browsers (including Firefox, Internet Explorer, Chrome, Safari) and mobile devices (as defined by GAO) to support GAO's GAOI of browser-independent and 508-compliant websites. Test both (1) the performance of site changes and (2) the performance of entire sites within upgraded browsers (see **Section J, Attachment BBB** Web Ops SOP (2258764)).
- B. Recommend Section 508 enhancements for providing products that are accessible to screen readers used by the blind; e.g., ASCII text, HTML.
- C. Develop Section 508 accessibility workflow methods and software solutions.
- D. Review the output and edit to correct any residual layout problems in tables and other sections. Much of the editing performed is to help format the material in such a way that it is also readable by sighted customers as well as by the visually impaired.
- E. Maintain and update the software used to create accessible products.
- 4. Propose innovations that improve the workflow by eliminating some or all of the manual procedures and support changes in GAO's accessibility approach. The contractor shall develop enhancements such as document structure for navigation and tagging that provide alternative text for images, tables, footnotes, and other special elements in documents.

C.3.5.17.3 WEB CONTENT MANAGEMENT, DISTRIBUTION, AND PUBLISHING

a. Overview

GAO's web-based resources play a significant role in supporting GAO's web content management, distribution, and publishing efforts. There resources include GAO's Internet and intranet sites, web services and applications, as well as special content areas on its Internet site that offer users improved access to bodies of work.

Prompt and accurate preparation and delivery of new products is vital to GAO's GAOl of providing timely information to Congress, GAO, and other requesters. Distribution and publishing is supported through use of a shared network drive and PMR. A critical component of this function is the dissemination of electronic copies of new products to specific recipients who must receive the product on the day of release in a specific time sequence.

GAO's web-based resources include:

- 1. PMR, a custom content management system that supports web content management, distribution and publishing.
- 2. Several content databases on GAO's internet that are not part of PMR, including the Bid Protest Docket and the Search Federal Rules function and the Executive Vacancies Search application.
- 3. The Web Content Management (WCM) system through which most GAO Intranet content is maintained by content owners.
- 4. Web services and support to several third-parties, including the Personnel Appeals Board, Tiny Findings, Fitness Center, Financial Auditing Standards Advisory Board, INTOSAI Journal, and Federal Evaluators.

- 5. Watchdog, a secure extranet through which GAO shares content, including restricted products, with our Congressional clients.
- 6. Special content areas on GAO.gov including <u>Duplication</u>, <u>Overlap and Fragmentation</u>; <u>Key Issues</u> and the <u>High Risk List</u>. Historically, there are about six of these a year.

One likely major special area to be developed over this TO period is a web format for the Fourth Edition of GAO's Principles of Federal Appropriations Law (Redbook). The current Third Edition is a four volume set of references published as integrated PDFs totaling 2,652 pages with over 6,000 interactive links among the volumes and approximately 2,500 electronic links to various references (products include GAO-04-261SP, GAO-06-382SP, GAO-06-1059SP, www.gao.gov/legal/redbook/redbook.html). The fourth volume includes the table of authorities, currently a 382 page document with linked indexes to all three volumes. FrameMaker was used to create and maintain the integrated index, a function not available in the other publishing applications used by GAO.

For web metrics, GAO uses Analog and Urchin software to process, analyze, and maintain raw server logs of intranet and internet activity. In addition, GAO uses Google Analytics on GAO.gov. The internal WCM also includes web metrics.

b. Background

The following is background on (1) the shared sever that supports the publishing function and (2) the distribution process for products:

- 1. **Shared server** GAO staff and contractors use a shared server, the "U: drive," to move content files (primarily Word, PDF, video, and audio files) from team and publishing staff to contractors providing the services in this section. For some products, GAO staff also provide sets of HTML files that comprise a supplement to the primary report known as an e-supplement. Contract staff are notified when these files become available with e-mail notifications. GAO currently uses FrontRange ITSM to track product postings. The PDFs are prepared for web posting using Adobe scripts that set the opening criteria, and that ensure metadata consistency with the related databases used for the external web. The daily volume of postings varies and is typically between 3 and 12. It may be as high as 25 products per day.
- 2. **Distribution Process** Distribution of new GAO products is based on instructions from GAO audit team staff, conveyed through the web based Product Distribution System (Form 115). Team staff submit Product Distribution Instructions (see **Section J**, **Attachment P**, GAO Form 115 User Guide) to initiate document distribution to those recipients to whom GAO units indicate delivery is required on the day of the product's release. These recipients generally include Congressional requestors, agency officials, and key GAO staff. During FY11 and FY12, 575 and 647, respectively, audit reports were delivered via distribution. Each year, about 3,000 transmittal e-mails were sent to notify recipients. The distribution function is supported by PMR.

GAO uses email to notify Congressional requesters, interested Hill staff, agency staff, and other interested parties that a product and its components are available for viewing. The email contains a URL that directs the reader to a secure server for obtaining the products electronically, prior to public release. The PMR secure distribution system interfaces with the Product Distribution System (Form 115) which captures email addresses and supports the delivery of email notifications with links to various web format and PDF copies of products.

During the TO, GAO may replace the current system with a new web-based application for collecting and managing the process of selecting distribution recipients and providing that information to contract staff.

About one-third of all new reports are initially restricted for about 30 days. Access to these reports is limited to GAO staff and the Congressional requestors. The Report Release Subsystem enables staff to release reports from their restriction. The application is set up to send a notification of each release to distribution staff so that the remainder of a distribution, beyond the Congressional requestors and internal recipients, can be completed. After Congressional Relations staff releases the reports, distribution resumes with emailed links of GAO products to all recipients listed on the Form 115, including one-time recipients (e.g., Federal, state and local government officials, and Hill recipients) and standard recipients. The standard recipients include the House Appropriations Committee, the House Oversight and Government Reform Committee, the Senate Appropriations Committee, the Senate Committee on Homeland Security and Government Affairs, the Congressional Budget Office, and the Office of Management and Budget.

Periodically, a published product must be reissued by replacing the product. GAO has a documented process for reissuance which includes:

- Replace the PDF file on the external website.
- Update and re-post the accessible text file on GAO.gov.
- Update the Product Metadata Repository.
- Suspend planned and demand distribution until new versions are received.
- c. **Requirements** The contractor shall provide the following support at a minimum:
 - 1. Support GAO in its efforts to maintain and develop its web-based resources, including:
 - A. Design, develop, test, deploy, maintain, trouble-shoot, and upgrade software, graphic design, user interfaces, databases, or web pages:
 - i. Update content databases (e.g., bid protest docket) residing on the external website and extranet sites (e.g., Watchdog) when new products are eligible for external access (see **Section J, Attachment BBB** Web Ops SOP (2258764)).

- ii. Maintain other GAO-supported sites, to include posting content, editing web pages, search capabilities, and limited web design services and related databases (see **Section J, Attachment BBB** Web Ops SOP (2258764)).
- iii. Routine update of existing internal or external web pages (4 or more updates a week) (see **Section J, Attachment BBB** Web Ops SOP (2258764)).
- iv. Trouble-shoot and maintain the existing in-house intranet web content management system, to include incremental functional improvements (see **Section J, Attachment V, GAO's** Web Content Management Executive Summary Documentation).
- v. Test websites, applications, and products with various web Browsers (including Firefox, Internet Explorer, Chrome, Safari) and mobile devices (as defined by GAO) to support GAO's GAOI of usable, high quality, browser-independent and 508-compliant websites. Test both (1) the performance of site changes and (2) the performance of entire sites within upgraded browsers (see **Section J, Attachment BBB** Web Ops SOP (2258764)).
- vi. Perform usability testing of internal and external web resources, including reports on findings that identify achievable solutions.
- vii. Evaluate user satisfaction survey responses and ongoing design in accordance with the information architecture, usability, and infrastructure established for GAO's internal and external websites.
- viii. Monitor email to the Webmaster and act in accordance with guidelines established by GAO (see **Section J, Attachment BBB** (Web Ops SOP (2258764) and **Section J, Attachment E** (SAMs)).
 - ix. Create and maintain documentation for all processes, scripts, applications, and application customization in a central location as defined by GAO.
 - x. Report on web service, web usage, and web performance, including intrusion detection (see **Section J, Attachment BBB** Web Ops SOP (2258764)).
- xi. Maintain an archive of data on usage of GAO's websites (timeframes to be specified by GAO).
- xii. Support tools and software new to the GAO environment as needed.
- B. Post and maintain content and files (HTML, PDF, accessible text, image, video, and podcast files, and other web formats as appropriate)
 - Post files provided by GAO of various formats throughout the day to internal, secure, or public websites. See Section J, Attachment BBB Web Ops SOP (2258764) and Section J, Attachment WW PMR section of Information Management SOP (138864). For details on the workflow, see Section J, Attachment PP, Report Processing Workflow Example Performed by Information Management.
 - ii. Post accessible text versions of new products on the external website and update the PMR and related systems. See **Section J, Attachment BBB**

Web Ops SOP (2258764) and **Section J, Attachment WW** PMR and Accessible Text sections of Information Management SOP (138864).

- C. Perform quality control procedures to maintain site integrity, e.g., ensure that the links to products are accurate and point to the correct files internally or externally (see **Section J, Attachment WW** PMR section of Information Management SOP (138864)).
- D. Improve content search and retrieval internally and externally including developing, implementing, and maintaining the internal and external search functions to optimize search and retrieval of information from the various GAO collections of PDF, HTML, and other files to include efficient use of GAO's corporate taxonomy and other product and content data.
- 2. Support GAO's efforts to enhance the presentation of its message through short-term efforts related to particular topics and special content areas to include working with designated GAO unit staff to design, develop, test, deploy, maintain, trouble-shoot, and upgrade functionality, software, graphic design, user interfaces, or databases critical to GAO websites. This work may include implementing search, retrieval, navigation, and user interface functionality.
 - A. Develop new specialized content areas, like Duplication noted above, to be presented as HTML content pages on GAO.gov, to include testing prior to deployment in a GAO-specified test environment in accordance with GAO-specified test procedures.
 - B. Support GAO plans for a web format for the fourth edition of Principles of Federal Appropriations Law (Redbook), currently published as the Third Edition in four PDF volumes (www.gao.gov/legal/redbook/redbook.html). This may happen periodically, requiring at least three to four months to complete each volume. The contractor shall maintain performance standards in other areas during this time.
- 3. Support web distribution and publishing services according to specific business rules designated by GAO, including secure, pre-publishing, and public distribution to Congressional requesters and other interested parties (see **Section J, Attachment WW** PMR section of Information Management SOP (138864)). For details on the workflow, see **Section J, Attachment PP**, Report Processing Workflow Example Performed by Information Management.
 - A. Post necessary files to appropriate locations for distribution:
 - i. Secure web pages for dissemination to Congressional clients.
 - ii. Pre-publishing (non-public) web pages for dissemination to Congressional and other (non-Congressional) recipients, agency, media, and other interested parties.

- iii. Public web pages including required metadata from third-party hosting services, e.g., YouTube.
- B. Use the existing Product Distribution System to notify appropriate parties via email:
 - i. Move e-mail addresses and product metadata from the Product Distribution System (Form 115) to PMR.
 - ii. Generate a unique URL for each audit product that will be used for secure distribution in PMR.
 - iii. Distribute e-mail notifications to Congressional clients, agency and other interested recipients, with product information about the release and the secure URL through PMR.
 - iv. Complete distribution when a product's public release notification comes from GAO's Congressional Relations staff.
 - v. Inform the public with automatic notifications through commonly-used channels, including listservs, RSS, and Twitter.
- d. See **Section J, Attachment W**, Government Furnished Information, Web Services, for software that supports this work.

C.3.5.17.4 PUBLISHING AND DISSEMINATION TECHNICAL SUPPORT

a. Overview

GAO's publishing process begins with GAO audit staff drafting products in Microsoft Word. They provide the draft to ISTS's Publishing and Dissemination Group (PDG) through a shared network drive for composition/layout services (e.g., formatting, inserting graphics and publishing quality assurance). GAO maintains product quality and product branding through tools and processes designed to maintain standards and minimize errors and expense during the publishing process. This includes software templates to support the publishing process as well as to support much of the work of the agency, e.g., documentation of audit activities, letters, and memos. GAO also uses industry-standard graphics and page layout applications to develop graphics, format documents, and prepare products for print and web publishing. GAO maintains a consistent workstation and publishing software configuration across all computer hardware and software used in the publishing process.

GAO publishes almost all products as PDFs, and some products have related electronic supplements (e-supplements) published as PDF or HTML. As noted in **Section C.3.6.17.3**, GAO's primary distribution "vehicle" is electronic dissemination. However, press-ready files are also created in PDF for GAO audit products and special publications approved for printing (about 50 products per year). Most press-ready files are prepared for digital printing. Offset printing is used for products with large print runs or for special print needs. To ensure quality, GAO uses preflight processing software primarily to check graphics by reviewing the fonts, image resolution, and color management prior to publishing. Prepress reviews are performed on files to be sent out for printing to ensure appropriate color management and usage, font

management, and consistency with standards regarding trapping and bleeds. Prepress functions are also conducted to change color to gray scale, when color printing is not desired.

GAO expects to move away from this very manual publishing process to a more automated process that will likely include creating and tagging XML or other content formats that can be repurposed into a variety of products. GAO audit staff may provide content though a user interface that facilitates the XML tagging, which will then be used to create content for products. The workflow changes will require software application tool changes, that are being procured by GAO and will be available during the first year of the TO, including new user interfaces, templates, and automation of some current manual processes. GAO also expects to revise its product line to include products that are more accessible to newer technologies (e.g., RSS feeds and mobile devices) while maintaining accessibility for customers with visual and auditory disabilities.

b. Background and Context

The following is background on (1) current uses of FrameMaker, Adobe InDesign and Microsoft Word Templates in support of the publishing process; (2) current uses of multimedia and interactive graphics, and (3) Help Desk activity requiring Publishing Technical Support (PTS):

1. Current Uses of FrameMaker, Adobe InDesign, and Microsoft Word Templates: GAO uses FrameMaker to create very complex documents, covers used for printing, and converting Word and other text content to 508-compliant documents. FrameMaker is used as an Open Database Connectivity (ODBC) database interface to download data for an annual "Quick Look" report, Defense Acquisitions: Assessments of Selected Weapon Programs, that pulls key data from a database on 60 to 80 weapons systems. FrameMaker cover templates are used to create cover files for printing; standard audit products, guidance and Sensitive but Unclassified (SBU) products. FrameScript modules interact with FrameMaker to convert all audit products and other publications to 508-compliant text files.

GAO uses Adobe InDesign to format GAO's special publications, which are drafted with Word, FrameMaker, and InDesign templates. These generally high visibility publications include color and unique formats and designs along with standard elements including copyright information, GAO's mission statement, and publication ordering information. GAO produces about 6 guidance documents (80 to 500 pages) and 15 other special publications (80 to 600 pages) annually.

GAO uses Microsoft Word templates and automation to format GAO's core products, including the audit reports, correspondence, briefing reports, and "Highlights" pages (single-page executive summaries). Other templates are used to create memos, letters, audit work-papers, General Counsel Decisions, and other documents. There are approximately 70 Word templates (see **Section J, Attachment LL**, Publishing and Technical Support Template Inventory). GAO continually upgrades the Microsoft templates as requirements evolve, e.g., GAO revised all of the templates during FY11 to support a default font change and a Windows upgrade. In FY13, the templates were

revised to accommodate a new GAO logo. Future revisions may take advantage of innovation opportunities; e.g., XML tagging of document content to facilitate document repurposing.

The Adobe InDesign, FrameMaker, and Word templates are created by augmenting the applications with coded scripts. The scripts are created with Visual Basic, JavaScript, and FrameScript programming languages.

- A. Current examples of software tools and specialty products (including templates that require coding and scripting maintenance) are described below: (see **Section J Attachment LL**, Publishing and Technical Support Template Index)
 - i. Highlights templates Word single page templates; one used for all products, plus 3 to 4 versions that use the same structure with varying titles; all use macros to assist user and specialized styles, designed for ease of use.
 - ii. Vertical briefing template Word template similar to Highlights, but uses multiple pages and macros to assist users, intended for dense material presented during briefing of Hill staff, designed for ease of use.
 - iii. Briefing slides with embedded U.S. and world maps PowerPoint template available in black and white and color, includes Adobe Illustrator compatible maps, designed for ease of use.
 - iv. Cover templates for draft reports and testimonies Word two-page templates used by GAO staff; templates used to create standardized covers with the GAO logo, product title, product number, addressee, and standardized copyright statement.
 - v. General Counsel Word templates General Counsel staff use 25 Word templates to format documents for posting, e.g., decisions and rules, and writing the formatted files to specific network drives for further processing. GAO expects to reduce the number of templates required to about half of the 25, but must revise the templates to fulfill product formatting requirements with a revised workflow.
 - vi. Standard letterhead and memorandum templates GAO staff use 18 templates to create official GAO letters and memoranda (formats are almost identical and vary according to location, e.g., the GAO Los Angeles FO letterhead). Templates are two page formats where the first page contains the GAO letterhead and format for page-one-content, and the subsequent page is used for formatting the content of the remaining letter or memorandum.
 - vii. Templates for GAO-08-467SP "Defense Acquisitions: Assessments of Selected Weapon Programs" an annual report on 60 to 80 weapons systems. The content for this report is pulled from a database using Adobe FrameMaker.
 - viii. Templates for audit reports typical GAO product (about 600 to 700 per year), created primarily with Word, but also FrameMaker and InDesign templates.

- ix. Templates for Special publications about 6 guidance documents (80 to 500 pages) and 15 special publications (80 to 600 pages) annually. Generally high visibility publications with color and unique formats and designs. Created with Word, FrameMaker and InDesign templates.
- x. CD templates for GAO products GAO uses CDs in a number of venues. Teams have distributed CDs at hearings, providing the Congress, the press, and the public with a compact, searchable compendium of the agency's work over a number of years. Teams have also distributed relevant CDs at conferences, on recruiting trips, and to researchers. For example, GAO provided copies of a compendium of products on FCC's E-Rate Program to a National Academy of Public Administration research team. GAO teams have used CD compendiums to familiarize new Hill and GAO personnel with the agency's body of work on specific issues.
- 2. Current Uses of Multimedia and Interactive Graphics: GAO uses multimedia products to complement or augment other published products. These multimedia products include interactive graphics in HTML, Flash and PDF, video, audio, and product CDs contain the primary audit product along with these multimedia components. These same components may be delivered in zipped form or from the website. CD content sometimes includes a single GAO product or includes a primary product with its companion product(s) or a compendium of reports and products that address a single issue. In each case, the CD uses Acrobat to provide search capability across all documents included on the CD. Examples include:
 - A. GAO's "Performance and Accountability Report" with links to approximately 500 GAO reports and supporting documents, such as GAO's strategic plan.
 - B. GAO-05-370 "Vehicle Safety: Opportunities Exist to Enhance NHTSA's New Car Assessment Program" included embedded videos of new-car crash tests.
 - C. CDs with a compendium of GAO reports and testimonies on such topics as National Airspace System Modernization, the U.S. Postal Service, and FCC's E-Rate Program.

GAO also uses interactive graphics and animation as components of products. Examples include:

Example 1	
Title	Neutron Detectors: Alternatives to Using Helium-3
Product Number	GAO-11-753
Date	September 29, 2011
URL	www.youtube.com/watch?feature=player_embedded&v=Lz7iEc
	RnGWo
Software Used	Flash Professional, Illustrator, Photoshop, Moya, Audacity
Approximate	30 hours
Development Time	
Example 2	
Title	How Revenue Sharing Can Work, and Its Potential Impact on
	Participants' Account Balances

Product Number	GAO-12-325
Date	April 24, 2012
URL	www.youtube.com/watch?feature=player_embedded&v=PIRGdu
	Ln59A
Software Used	Flash Professional, Audacity, Adobe Media Encoder
Approximate	20 hours
Development Time	
Example 3	
Title	Supplemental Security Income Interactive Maps
Product Number	GAO-12-498SP
Date	June 2012
URL	www.gao.gov/special.pubs/gao-12-498sp/All.html#11
Software Used	Fusion Maps, XML, Dreamweaver, jQuery, JavaScript
Approximate	25 hours
Development Time	

- 3. GAO PTS Help Desk Activity: Forty to fifty percent of the publishing technical support activities are for Help Desk and service calls usually with respect to publishing-related applications, e.g., Word and PowerPoint, Acrobat and other Adobe products, and specialized Word templates used agency-wide. This is a distinct Help Desk from the customer service/infrastructure Help Desk. However, both Help Desks use FrontRange ITSM. Current Help Desk activity averages 15 to 30 Help Desk calls per week (about 22 total hours). Preflight advance reviews vary from 5 to 25 per week, along with 8 to 10 color preflight assistance calls (averaging about 5 hours total per week). Some special publications require extensive assistance; e.g., GAO's annual assessment of weapons systems, "GAO-08-467SP Defense Acquisitions: Assessments of Selected Weapon Programs" required about 20 hours.
- **c. Requirements:** As directed by GAO's Publishing and Dissemination Group (PDG), the contractor shall provide publishing technical support (PTS) for all facets of GAO electronic publishing and dissemination process print, web, and multimedia to GAO staff and other contractors who use software for graphics, composition/layout, editing, distribution and quality assurance, including at a minimum:
 - 1. Provide tool support and technical support for graphic production, document composition, and printing, including using GAO's applications in support of publishing to increase the functionality of publishing applications and support for software used in the publishing process for graphics, video, layout design, multimedia, interactive graphics, short animations and XML:
 - A. Use Finite Matters FrameScript, visual basic, and JavaScript to add functionality to the document layout software applications.
 - B. Create Scripts in Enfocus PitStop Professional and in Acrobat that automatically perform prepress evaluations prior to digital or offset printing, e.g., to identify problems with fonts, image resolution, and to correct color settings.
 - C. Write prepress/preflight Enfocus PitStop software scripts to automate reviews of publications to identify locations of linked images, check color management in

- file, monitor the use of fonts and identify unembedded fonts, identify the image resolutions used, and identify the pages where these instances exist, and then export the information to a preflight report created automatically.
- D. Develop an alternative to using FrameMaker for satisfying the QuickLook publications requirements.
- E. Develop publishing process enhancements that support electronic publishing of products including researching and recommending revised software settings.
- F. Develop process improvements for "preflighting" files used for printing products.
- G. Review and recommend preflight standard revisions for various file types (e.g., PDF versus Word, InDesign, and FrameMaker native files), color management, fonts, and image creation.
- H. Maintain, revise and test Microsoft and Adobe product settings, as well as other software products used in publishing production.
- I. Create scripts to assist in processing files for use by screen readers as part of the Section 508 compliance program.
- J. Assist with PDF creation; multi-chapter document layouts; using the Adobe book file approach to track and combine all component files; setting up single and multiple master pages; and applying style sheets.
- K. Support quality and GAO product branding, as well as maintain standards and minimize errors by assisting quality assurance and printing prepress activities during the printing and publishing process.
- L. Research and advise on publishing standards, software and hardware settings, workflow improvements, shortened processes or automated procedures for GAO product and content publishing production, including software and hardware tools used by graphics, layout, and web services staff.
- M. Assist with complex graphic design, typography, composition and layout, color, line, shape, mass, and texture; specifically, applying appropriate typographic specifications, such as type fonts, style, size, leading, kerning, spacing, alignment, and line length; designing and composing page layouts using grid formats, headers, footers, folios, margins and columns, and pagination; and scanning, cropping, and scaling photographs, illustrations, and other graphic images.
- N. Provide support for color theory and the application of grayscale, process colors (CMYK), spot colors (Pantone Matching System), monotones, duotones, tritones, color balance, and screens, gradients, and halftones as they apply to lithographic and digital printing.
- O. Provide print production support by working with printing specialists to develop effective prepress/preflighting techniques for creating designs that RIP (raster image processing) quickly; ensuring that the color management system is functional and appropriate, such as CMYK color mode verses RGB color mode; choosing the appropriate scan resolution for the best output; and following the outside contract printers' standards regarding trapping, bleeds, and other special requirements.
- 2. Provide multimedia technology support to enable consistent production of a variety of multimedia products in different formats, to include:

- A. Develop methods for presenting GAO publications and their components in multiple formats, including PDF, HTML, XML, and related formats.
- B. Develop procedures, techniques and standards for interactive graphics presented in PDFs and as HTML files using InDesign, Fusion Charts/Maps and Google VIS.
- C. Provide multimedia interactive graphic and animation support by assisting in the creation and development of interactive graphics and short animation videos, and by researching and developing techniques for interactive graphics and animation used in the PDF and the HTML environments.
- D. Create and maintain templates used to create CDs, revise procedures as necessary to implement new technology and software used to create the CDs and their contents.
- E. Produce CDs with compendiums of related reports, or as a method for delivering files which cannot be e-mailed to the Congressional requester; e.g., e-supplements not released to the public, and SBU documents (see **Section J, Attachment CCC**, CD Creation section of Publishing Technical Support SOP (4167390)).
- 3. Provide technical and development support for users to include direct on-site user support and assistance to the Help Desk with respect to publishing software issues:
 - A. Receive calls from the Help Desk contract staff and direct calls and email through a special mailbox (<u>GraphicHelp@gao.gov</u>) primarily from GAO staff, which are publishing-specific queries or requests for assistance (see **Section J**, **Attachment CCC**, Publishing Technical Support SOP (4167390)).
 - B. Provide in-depth technical assistance, publishing best practices and troubleshooting with software used frequently during the publishing process, specifically Microsoft Word and PowerPoint, Adobe Acrobat, Illustrator, Photoshop, InDesign, and FrameMaker.
 - C. Perform needed analysis to determine where in the workflow an error was introduced that corrupted a file, content, fonts, or images and recommend appropriate solutions.
 - D. Minimize software and hardware problems in the publishing functions through testing and troubleshooting, initiating special projects to improve the electronic publishing process, and providing other IT technical support to GAO customers related to the use of publishing software and hardware.
- 4. Develop/upgrade, document, implement and maintain GAO Product Templates (see **Section J, Attachment LL, Publishing and Technical Support Template Inventory).**
- 5. Create software tools and improved production processes for new products and product enhancements.
 - A. Document all software publishing tools created for use with the publishing-related software applications, e.g.:
 - i. Create user guides, Help Desk instructions, and training-related instructions.
 - ii. Document all scripts and modifications to templates and applications used in the publishing process (see **Section J, Attachment CCC**, Publishing Technical Support SOP (4167390)).

- iii. Maintain an inventory (configuration management record) of all software revisions, version changes, and revised and new scripts used by the software applications (see **Section J, Attachment CCC**, Publishing Technical Support SOP (4167390)).
- iv. Record the requirements, solution, date, installation location and how the tools are used relative to all software revisions (see **Section J**, **Attachment CCC**, Publishing Technical Support SOP (4167390)).
- B. Maintain GAO's image library (of several thousand images) to support researching images to be used in GAO publications and enhance the image library's web-based user interface (see **Section J, Attachment CCC**, Image Database section of Publishing Technical Support SOP (4167390)).
- 6. Maintain consistent publishing software/hardware configuration management and control to support continuous improvement in the publishing process:
 - A. Use sound configuration management practices throughout the process of requirements gathering, development, testing, and implementation and manage the IT publishing configuration through a centralized control process to include:
 - i. Document and control changes to the publishing process, including software, hardware, and procedures affecting the IT requirements.
 - ii. Follow GAO's SCR management system as the administrative mechanism for orderly change control with priorities.
 - iii. Support quality assurance programs to fully test publishing hardware and software to ensure effective implementations and process improvements, as defined in the ISTS quality assurance procedures (see **Section J Attachment FF, ISTS Quality Assurance Procedures QA Testing).**
 - B. Maintain consistent workstation platforms for approximately 60 machines running Windows XP and the standard configuration image.
 - C. Maintain consistent publishing software configurations for the dedicated publishing workstation platforms for the necessary software and any new components added to the publishing software configuration.
 - D. Upgrade, maintain, and perform acceptance/validation testing for publishing-related software and hardware specifications.
 - E. Install, upgrade and maintain technologies used for digital photography, e.g., software used with digital images such as PhotoShop and LightRoom.
- 7. Support continuous process improvements to GAO's publication workflows through IT enhancements, quality assurance feedback, technical support, education efforts, and recommended standards and specifications for software settings.
- d. Provide a Publishing Technical Support Activity Report (see **Section F, Deliverable 15**), including meeting minutes and agenda, which describes work performed during the reporting period, problems and recommended actions, action items addressed, and project milestones and status for assigned projects.
- 8. Track tasks with FrontRange ITSM.

d. The following software support and expertise are used in this work:

- 1. Publishing
 - A. Programming (e.g., JavaScript, Visual Basic, VBA, .NET, PHP, XML (including document type definition (DTD) and style sheets).
 - B. Knowledge of database management systems (e.g., Oracle, MySQL, Microsoft SQL Server, Microsoft Access).
 - C. Working with print vendors.
 - D. Knowledge of color management issues, for print and web.
 - E. Working with Adobe Acrobat Forms or Adobe LiveCycle.
 - F. Laying out and publishing long documents with Adobe InDesign, MS Word, 2007, and PowerPoint 2008 (including functions that can be controlled with Visual Basic and JavaScript) Adobe FrameMaker, Quark or other software.
 - G. Creating templates in publishing software (InDesign, MS Word, Adobe FrameMaker or Quark).
 - H. Knowledge of preflight and prepress procedures.
 - I. Supporting preflight prepress applications, i.e., Enfocus Pitstop Professional (plug-in for Adobe Acrobat).
 - J. Knowledge of Section 508 compliance.
 - K. Provide general graphic design.
 - L. Create and repurpose content for CDs, multimedia, and web.
 - M. Web Design and support for HTML editing.
 - N. Desktop publishing.
 - O. Providing customer service/technical support.
- 2. Multimedia including motion graphics and implementing conceptual ideas, working with teams, and creating effective animation output, with the following:
 - A. Flash animation.
 - B. Adobe CS Web Premium, including DreamWeaver, Flash Professional, Media Encoder, and Adobe products.
 - C. Audacity.
 - D. XML and JavaScript coding, and ¡Query JavaScript library.
 - E. Google Visualization tools (VIS, Charts) and similar interactive web tools.
 - F. Fusion Charts, Maps.
 - G. Axialis Icon Workshop.
 - H. Typhoon software for creating AutoRun.
 - I. Teleport Pro (used to download web pages).
 - J. Able to integrate GNU/GPL, MIT licensed open source code to enhance for web/multimedia graphics when necessary.
 - K. Support of industry standard video/ audio editing, including video conversion and editing tools; e.g. Movea Small Web Format (SWF) utility, AVS video converters, and editors.
 - L. Basic support of third-party charting and graphing programs (Google Charts API, Fusion Maps) and familiarity with functional creation of interactive web display.
 - M. Basic support of Webkit and W3C standards.

- N. Creating and repurposing interactive multimedia content for web or CD deployment.
- O. Web Design including support with HTML, incorporating, expanding upon and incorporating code.
- P. Working with web data visualization tools like Google Vis, Google Charts, jQuery, Fusion Charts, Fusion Maps.
- Q. Providing customer service/technical support.
- 3. Adobe applications (current and prior version):
 - A. Creative Suite and their components such as the InDesign, PhotoShop, and Illustrator applications.
 - B. CS integrated suites, including the applications above.
 - C. Acrobat Professional and above, including specific functions used for preflight/prepress, and forms design using LiveCycle.
 - D. InCopy.
 - E. FrameMaker 7 and 8.
 - F. Lightroom.
- 4. Various web browsers (including Firefox, Internet Explorer, Google Chrome, Safari).
- 5. Color calibration tools; e.g., Monaco Optix XR Pro.
- 6. Section 508 accessibility tools, e.g., OmniPage OCR software, screen reading tools such as JAWS, PDF editing and diagnostic tools such as NetCentric.
- 7. PDF editing and diagnostic tools, e.g., Apago PDF Enhancer used for repairing PDFs and NetCentric CommonLook.

C.3.6 TASK 6: ADVANCED OPERATIONS SERVICES

The contractor shall provide subject matter expertise in areas such as operating systems, databases and servers, telecommunications network infrastructure and services, and security to better support the integration of system and network changes, design modifications, and capacity management to ensure the optimum current operational environment. In addition, the contractor shall support the planning of future requirements based upon either technical changes or business driven changes requiring a change in the current operational environment. Historical GAO processes for managing Advanced Operations Services can be found in **Section J**, **Attachment Y**.

C.3.6.1 ADVANCED CROSS FUNCTIONAL SERVICES

C.3.6.1.1 TECHNOLOGY INSERTION

The Contractor shall work with third party vendors to integrate new technologies into existing system architectures. To the greatest extent possible, the Government will provide known information on system design, operations, maintenance, and applicable technologies that will be included in the integration and transition of new technology into the GAO environment. Commercial-off-the-shelf (COTS) equipment and software shall be used to the greatest extent possible.

C.3.6.1.2 FIELD OFFICE & ALTERNATE COMPUTING FACILITY SUPPORT

Ongoing operations may warrant extended contractor representation at operational sites in the field, the Alternate Computing Facility, or other locations for various purposes. In such instances, the Contractor may be required to physically observe, monitor, and evaluate system performance, collect data, provide on-site assistance for operational problems, and/or perform as a liaison between Government, Contractor, and/or other Subcontractor/Vendor representatives. Requirements for field representation may be presented to the Contractor and required as an integral part of problem resolution and/or work assignment. Contractor personnel assigned to field activities shall be fully qualified individuals who have a specific knowledge of the systems related to a given work request.

C.3.6.1.3 PROTOTYPE/PREPRODUCTION DEVELOPMENT, BUILD, TEST, AND EVALUATION SUPPORT

The Contractor shall support the building of prototypes, pre-production (Post Test Readiness Review) units, or one-time production units, participate in or conduct tests and evaluate the item(s) against specified requirements. The contractor will deliver all requested technical documentation for final review and approval by the Government. The Contractor may also be required to participate in the integration, testing, and validation of third party systems being delivered into the GAO production environment as an operational component.

The Contractor shall support the Government in the definition and development of test programs, plans, and procedures, conduct testing, evaluate and/or document the results of testing and evaluation. Types of testing may include, but will not be limited to: hardware and software component testing, subsystem and system level development testing, system compatibility testing, acceptance testing, functional testing, integration testing, qualification testing, and beta testing. The Contractor shall perform all activities associated with conducting tests or provide technical support to government personnel with test program requirements support.

Test and evaluation support when required may include but are not limited to:

- Independent Verification and Validation (IV&V)
- Operational Test & Evaluation
- Demonstration and Validation (D&V)
- Functional Tests
- Integration Tests
- Maintainability Test
- Component test
- Performance test
- Application test

The Contractor shall install, or assist the government in installing, third party vendor components or system hardware and software. When such installation is required, the Contractor shall assist

the Government in identifying all equipment, utilities, and associated activities required prior to and during installation at the installation site. The Contractor will assist the government in identifying required Government Furnished Equipment (GFE) and Government Furnished Material (GFM) necessary for the third party equipment installation.

C.3.6.1.4 TROUBLE SHOOTING, SYSTEM ANALYSIS, AND HARDWARE/SOFTWARE ENGINEERING SUPPORT

The Contractor shall provide under the Advanced Operations work the necessary expertise in the areas of trouble shooting, system analysis and hardware/software engineering support. This support may require the manufacture, acquisition and assembly of hardware and/or software as required to accomplish the engineering support objectives. To accomplish these objectives, the Contractor shall acquire and assemble any necessary hardware and software through either GAO Acquisition Management or SRA procurement processes. Whenever feasible, available government equipment, supplies, facilities, and resources shall be provided by the government. Engineering support services may include but are not limited to: analytical engineering, capacity analysis system integration engineering, independent engineering tests, and development of engineering concepts and design packages.

The Contractor shall design, develop, construct, purchase, and install systems and/or automated/mechanized processes necessary to optimize maintenance and repair activities. These activities may include:

- a) Mean Time Between Failure (MTBF)
- b) Mean Time To Repair (MTTR) for each piece of equipment
- c) Long term and temporary workload
- d) Data Correlation Validation
- e) Process Analysis
- f) Recommendations
- g) Process Improvement
- h) Process Implementation

C.3.6.1.5 System Integration and Operational Transition

The Contractor shall support the delivery, testing, and maintenance of the hardware/software/licenses necessary to integrate third party systems into the operational environment. To ensure the Contractor can meet Government expectations, the Government will notify the Contractor 90 days prior to projected system turnover. The Contractor will ensure that all skills and experience needed at the time of system delivery are available at the time of system acceptance by the Government. Examples of software/hardware/firmware include, but are not limited to the following:

- 1) Automatic Test Equipment (ATE)
- 2) Automated Data Processing Equipment (ADPE)
- 3) Process Automation
- 4) Software Development and Support Environments/Tools

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- 5) Software for automating paper-based processes
- 6) Electronic repositories
- 7) Data base Creation/management
- 8) Test Software
- 9) Web development
- 10) Information Technology support

C.3.6.1.6 DOCUMENTATION

Documentation requested by ISTS shall be developed, created, revised, and/or updated as needed. Documentation may include but is not limited to technical manuals, design review packages, engineering drawings and schematics, associated engineering lists, and Standard Operating Procedures (SOPs).

C.3.6.1.7 TRAINING

The contractor may be required to attend or obtain training in support of any technology insertion, refresh, or upgrade efforts to ensure contractor staff members have the appropriate skills and knowledge to maintain the operational environment.

C.3.6.1.8 <u>VENDOR/CONTRACTOR SOURCE EVALUATION SUPPORT</u>

The Contractor shall assist the Government in the evaluation of third party Contractor/Vendor solutions. This may include such actions as research and evaluation, verification, and validation of contractor and system related capabilities.

C.3.6.1.9 BASELINE MAINTENANCE

The GAO requires the documentation of baselines for the technology implemented within the IT infrastructure. This documentation includes, but in not limited to the following areas:

- a. Baseline Performance Reports (see **Section F, Deliverable 16**) for applications, databases, network, video, telecommunications, and internet services.
- b. Configuration and Hardening Standards (see Section F, Deliverable 17) for technology.
- c. SOPs (see Section F, Deliverable 18) for current and new technologies.
- d. System Design and Network Documentation (see Section F, Deliverable 18).

C.3.6.1.10 <u>LIFECYCLE MANAGEMENT</u>

The GAO requires effective documentation to support the current and future implementation of technologies within the IT framework in support of the integration of services, change management, and problem resolution of current technologies. Those activities include but are not limited to:

- a. Design and integration of technology within the Change Management Activity.
- b. Continuity planning and testing.

- c. Performance reporting for applications, datacenter, security, and network technologies.
- d. Capacity Planning Documentation (see **Section F, Deliverable 21**) for applications, datacenter, security, and network technologies.

C.3.6.1.3 REMOVED

C.3.7 TASK 7 - ENTERPRISE ARCHITECTURE SUPPORT

The contractor shall provide a range of analytical and planning support for the Enterprise and Segment Architecture, Business Analytical, Business Intelligence, and Enterprise Data Management activities described below. Current EA Program GAOls include the following four elements:

- a. Support business, IT, and investment decision-making through EA analysis and transition planning.
- b. Support standardization of the business and technical architecture.
- c. Eliminate and reduce redundancies in the architecture.
- d. Make incremental EA Program progress against the current GAO Enterprise Architecture Management Maturity Framework (see **Section J, Attachment O**).

See **Section J**, **Attachment Q** for GAO's complete IT Strategy.

- a. Enterprise and Segment Architecture Support The contractor shall provide enterprise and segment architecture support for the development and management of the GAO EA, IAW the OMB's FEA Practice Guidance (FEAF) and GAO's EA Management Maturity Framework (see Section J, Attachment O). The EA program has common products resulting from As Is and Target Architecture documentation and analysis that include business functions and processes, GAO technologies, existing systems documentation, and Segment IT portfolios. The contractor shall provide the following support:
 - 1. Develop and maintain an integrated segment architecture for the Engagement/Work Management, Human Capital Management, Financial Services, and Technology Management segments.
 - 2. Develop and maintain an integrated enterprise architecture across the four architectural segments, and develop and maintain enterprise-level architectural documents and EA program documents IAW OMB and GAO guidance (e.g. TRM, PRM, SRM, DRM, BRM).
 - 3. Assess EA maturity against the GAO Enterprise Architecture Management Maturity Framework (EAMMF), and work toward the top level of maturity.
 - 4. Develop Work Products (see **Section F, Deliverable 48**) as requested by the Government that are associated with the above mentioned tasks. Representative examples of work products include: an EA Program Management Plan EA Concept of Operations documents, Performance Architecture (including measures and reporting), an Enterprise Transition Plan, Segment Roadmaps Modernization Blueprints, Process Flow Diagrams, Activity Models Data Models (see **Section J, Attachment G** and **G.1**).

- 5. Assist in the development of communications and reports to stakeholders, such as the EA Oversight Group (EAOG).
- 6. Support Integrated Assessments of proposed architectural changes from various perspectives (Business Architecture, Technical Architecture, Security, Records, Privacy, and Continuity) in support of decision making, so that the change is fully understood, properly coordinated, and there are no unintended architectural consequences.
- **b. Business Analytical Services** the contractor shall provide support to manage change to business processes that result from IT implementations, integrate business processes with IT solutions as they are being implemented, and deliver business intelligence and analytical reporting services to business users. The contractor shall provide the following support:
 - 1. Provide analytical services to support business optimization and improvements (e.g. conduct pain point analysis, identify business requirements, develop use cases, translate business requirements to technical requirements, develop process models and data flow diagrams, and conduct process improvement initiatives).
 - 2. Conduct market research to identify potential solutions to meet identified business requirements.
 - 3. Support development, capture, and analysis of performance measures
- c. Business Intelligence Services The contractor shall provide the following support:
 - 1. Analyze and develop requirements for data transformation for Extract, Transform, and Load (ETL) implementation.
 - 2. Maintain a repository of common and/or conformed dimensions between and among data marts.
- **d.** Enterprise Data Management The GAOl of Enterprise Data Management is to migrate GAO towards the use of authoritative, timely, and reliable sources of data, and implement master data management strategies, plans, and integration techniques. Current GAO tools utilized include ErWIN and Visio. The contractor shall provide the following support:

Identify, architect, and model the organization's data reporting and interfaces by creating and maintaining a Comprehensive Inventory (see **Section F, Deliverable 22**) of GAO data. This shall be done by reviewing and cataloging all data used to support GAO business processes and decision making in both normalized and system specific forms.

The contractor may also be required to support all or some of the following activities, based on demands imposed on the Enterprise Data Management group and reporting requirements of EDM:

1. Develop, manage and maintain appropriate As-Is and Target Views of the organization's data by utilizing tools such as an enterprise data logical data model, physical system models, data dictionaries, process models, information flows, activity models, Create, Read, Update, and Delete (CRUD) matrices.

- 2. Create enterprise, solution, and project specific data and technical architectures based on defined business needs and aligned them with industry and GAO standards.
- 3. Develop and maintain system or initiative specific migration plans to reflect how data management and integration strategies are being incrementally implemented within context of the overall EA.
- 4. Define and monitor achievement of performance and quality measures in order to assess the impact of implemented process improvements and system changes in achieving data management and integration objectives.
- 5. Assess results of performance measures, determine progress achieved, and develop action plans to make necessary improvements.
- 6. Provide expert advice on information technology standards, methods, and technologies related to data base design, data mart/warehouses, BI, enterprise reporting, and current web-oriented programming platforms.

C.3.7.1 ENTERPRISE APPLICATIONS SUPPORT

The contractor shall provide ongoing application development and maintenance support for the installed base of GAO custom, COTS, GOTS, open source applications, including web-based resources such as the intranet/internet and SAAS solutions. See **Section J, Attachment I** for the Applications Inventory. See **Section J, Attachment II** for a list of key GAO technologies. Additionally, see **Section J, Attachment NN** for the Target Enterprise Capabilities View and **Section J, Attachment OO** for the Target Enterprise Technologies and Capabilities View.

Besides being used to accomplish individual work assignments, IT is used to share information and collaborate with others across teams and geographic locations. The contractor shall partner with GAO staff and other GAO contractors responsible for developing, maintaining, and updating IT infrastructure and services to perform quick, effective, and in-depth troubleshooting, diagnoses, resolution, and follow-up to problems that affect GAO operations.

Where applicable and/or as defined within EA Support, the contractor shall provide operational maintenance; troubleshooting/patching/testing; integration, and related testing; acceptance testing; minor enhancements/updates; development tools administration and support; systems administration; ad hoc and standard reports/scorecards/dashboards; transactional processing; functional systems support; BI operational maintenance and support; rapid applications/forms automation support; asset/ items management; systems documentation upkeep and maintenance; configuration management; survey support services; and related support for GAO. In supporting these activities, the contractor shall use industry-standard software development life cycle (SDLC) models, GAO Application Development and IT Life Cycle Standards, and GAO's Application Development Methodology (ADM) to develop quality software products. Currently, GAO is moving toward a more contemporary development methodology with elements of Agile. All legacy applications have been developed using the waterfall methodology; however, all future applications will use the Agile development methodology.

Examples of GAO application support services and tasks include application enhancements and maintenance, systems integration, documentation, control procedures, testing and quality

assurance, configuration management, and database management to support the ongoing operational requirements of GAO-wide and specific GAO unit applications.

The contractor shall provide full system life-cycle support including, but not limited to requirements definition, systems analysis, design, logical and physical database design, user interface design, software design and development, database management, software testing and quality assurance, prototyping, integration, training on technical aspects of the systems (not new-hire training), and documentation of software. The contractor shall comply with and support GAO's information technology governance policies, directives, and practices. The contractor shall maintain GAO applications through the use of the following primary information technologies and methods:

- a. Java.
- b. PHP.
- c. Perl.
- d. JavaScript.
- e. Oracle Database.
- f. Oracle MySQL Database.
- g. Microsoft SQL Database.
- h. PL/SQL.
- i. Linux System Administration.
- j. Windows System Administration.
- k. Pentaho BI Platform.
- 1. Liferay Portal Enterprise.
- m. XML.
- n. HTML.
- o. Adobe Cold Fusion.
- p. Microsoft Visual Basic and VBA.
- q. Microsoft Access.
- r. Sybase PowerBuilder.
- s. C/C++.
- t. N-tier architecture in Internet and Secure Network environments.
- u. Sencha Architect Enterprise Edition.
- v. Atlassian JIRA, Greenhopper and Confluence.
- w. Borland StarTeam.
- x. Apache Subversion (SVN).
- y. CA Erwin Data Modeler.
- z. HP Quality Center.
- aa. Balsamig.
- bb. Microsoft SourceSafe.

At this time, GAO envisions that most application development under this task order will use web technology. The Government may require software engineering services in a client/server environment or other, as yet to be determined, environment. The contractor shall be able to adapt to work with emerging/changing technologies.

As many other Federal and local Government agencies, GAO relies on Government shared services and/or Software As A Service (SaaS). In the industry this model can also be referred to as, On-demand, Cloud-based computing, and other derivative names. Many systems currently in use by GAO, including mission-critical ones, are hosted and operated outside the internal GAO network by SaaS providers. GAO uses such SaaS systems, often acting as the authoritative data source to other GAO systems. The contractor shall provide coordination, software engineering, systems integration, testing, documentation, and operational maintenance for any GAO systems interfacing and/or interacting with such SaaS.

a. Operational Maintenance

The contractor shall perform operational system maintenance. The primary GAOI of operational maintenance is to delay, avoid, or mitigate the consequences of failure of systems and/or degradation of services supported by systems. This may be by preventing the failure before it actually occurs, which routine/recurring, planned, and condition-triggered maintenance help to achieve, or by correcting the failure after it occurs. The need for adaptive and perfective maintenance is also recognized as part of the required operational maintenance.

For the purposes of this document, preventative maintenance is defined to preserve and restore system reliability by modifying system components or data before they actually fail or corrupt. Preventative maintenance activities may include partial or complete overhauls at specified periods, replacement of consumables, log rotation, archival, etc. In addition, maintenance staff can capture performance deterioration to modify system components before they cause system failure including degradation of service. The ideal preventative maintenance would prevent all system failure before it occurs. The contractor shall complete an Enterprise Applications Maintenance and Support Report (see **Section F, Deliverable 25**).

Preventative maintenance can be divided into two subgroups: planned maintenance and condition-triggered maintenance. The main difference between the subgroups is determination of maintenance time or determination of the moment when maintenance should be performed.

Corrective maintenance is defined as a reactive modification of a system or data performed after delivery to correct discovered problems. Corrective maintenance is a maintenance task performed to identify, isolate, and rectify a fault so that the failed system can be restored to an operational condition within the tolerances or limits established for in-service operations.

Adaptive maintenance is defined as modification of a system performed after delivery to keep it usable in a changed or changing environment.

Perfective maintenance is defined as modification of a system after delivery to improve performance or maintainability.

Operational maintenance is primarily of concern in the service operation stage and, more specifically, covered in the event, incident, and problem management processes.

b. Troubleshooting/Patching/Testing

The contractor shall perform troubleshooting needed to maintain systems where the symptoms of a problem may have many possible causes. A symptom is defined as any unexpected or undesirable behavior. The task of troubleshooting involves identification of malfunction symptoms or degradation of service, determination of the causes, remediation of the problems, and confirmation that the solution restored the affected system to its acceptable operating state.

As part of troubleshooting, the contractor may need to develop and apply software patches, hotfixes, or otherwise modify the system to return it to its acceptable operating state. All such activities shall have a rollback strategy and be tested in accordance with ISTS testing procedures as described elsewhere in this document.

The contractor shall develop troubleshooting procedures organizing the troubleshooting into the most efficient process where warranted by the complexities, mission criticality, or undocumented institutional systems knowledge.

The contractor shall record and document troubleshooting efforts in sufficient detail to speed up similar subsequent troubleshooting, retain knowledge, facilitate correlation analysis/metrics, and to contribute to the knowledgebase.

c. Integration Support/Testing

In addition to typical and customary unit testing, the contractor shall provide support to software/systems integration and integration testing within and across different teams and systems when necessary. This may include working with third parties such as other contractors and/or vendors to ensure the software modules or components are combined and tested in larger aggregates comprising an integrated system.

This includes performing activities related to integration support and related testing when an existing system is updated to include new, updated/expanded, or deprecated functions. This may also include activities when other systems (being developed or existing) must interface or integrate in any form with an existing system.

ISTS develops, maintains, and approves test plans and procedures that the contractor is expected to adhere to, e.g., use of automated tools such as WebInspect and Test Director for the Quality Center is required.

d. Acceptance Testing (in house under this Operations contract)

GAO systems shall be subject to formal acceptance testing in accordance with approved test plans and procedures developed and maintained by ISTS. The contractor shall perform or assist with acceptance testing (the Government is responsible for final acceptance) following any new enhancement or operational maintenance. Such testing may occur after normal business hours. Acceptance testing is defined as relating to a wide range of acceptance concepts including functional testing of a user story by the development team during implementation, user acceptance testing, operational readiness testing, or any other testing performed near the time for

delivery/deployment following any new development or operational maintenance of an existing system.

The frequency of acceptance testing is estimated at approximately 20-30 test cycles annually for a portion of, or entire applications inventory. Only authorized GAO Federal staff may certify/sign-off acceptance testing results. Acceptance testing may be certified with remarks and/or conditions.

e. Minor Enhancements/Updates

Minor enhancements and updates are considered part of the operational maintenance tasking and are defined as any new or reworked features, fit, appearance, or function of the system including databases and/or data structures. These minor enhancements may be issued periodically on schedule or as needed. The contractor shall work with GAO to identify and analyze enhancement requirements or improvement opportunities, prioritize, and plan enhancements implementation, that shall follow customary GAO systems development processes including governance.

Currently these minor enhancements and updates are not centrally tracked within ISTS. It is the GAOI of GAO to move towards a central tracking system (planned September, 2013).

f. Development Tools Administration and Support

GAO relies on a number of systems development tools including requirements management tools, Integrated Development Environments (IDE), task/assignment management, source code repositories, configuration management, test automation, and other categories. Most, but not all of these tools are open-source, COTS, or GOTS tools. The contractor shall provide administration and operational support such as ongoing configuration and customization for these tools, which may be used by Federal staff, business partners, customers, and other contractors.

For the tools administration function, the contractor shall perform or participate in operational maintenance, support end-user on-boarding/archival, conduct end-user orientation, and provide system's Subject Matter Expertise (SME). In this capacity, the tools administration function shall support development, participate in troubleshooting, maintenance, and coordination of other tools-related tasks.

g. Systems Administration

System administration is necessary to maintain and operate line-of-business computer systems at GAO. The contractor shall perform systems administration including tasks such as adding, deleting, and updating user accounts/roles, answering technical questions, troubleshooting issues, documenting systems, performance tuning and optimizing. The system administration function shall be able to perform or participate in operational maintenance, support end-user on-boarding/archival, conduct end-user orientation, and provide system's Subject Matter Expertise

(SME). In this capacity, the systems administration function shall support development, participate in troubleshooting, maintenance, and coordination of other system-related tasks.

h. Ad hoc and Standard Reports, Scorecards, and Dashboard.

The contractor shall analyze, design, develop, document, test, and maintain custom and predefined queries and produce ad hoc and standard reports out of GAO systems and/or data structures as needed. This includes maintenance of the self-service reports and/or facilities necessary to produce such self-service reports, views, scorecards, and/or dashboards. Specifically, the Government seeks the development of an Enterprise Applications Dashboard (EAD) within the first quarter of the base period. The EAD shall be a web-based view of the status of the enterprise applications at any given point in time and trending data with the ability to drill into details. The EAD will allow for reporting and analyzing trends over time. It contains information on operational health and related data. Through a unified interface, EAD presents this information to ISTS executives, management, and staff responsible for the enterprise applications within their purview. The EAD will include for each application the following categories of information: operational health status comprised of various check points, performance statistics refreshed periodically, scheduled events/tasks, tasks, and tickets. The Government will establish SAMs in conjunction with the contractor for this functionality.

i. Transactional Processing Support.

The contractor shall support GAO transaction processing needs related to systems and/or processes where applicable. The contractor shall also administer routine daily processes and scheduling requirements, including transactional support to any GAO systems. This usually occurs in varying frequencies (some daily, weekly, monthly, and annually).

j. IBM Mainframe Support

GAO receives extranet services through Government Shared Services with the National Finance Center to provide IBM Mainframe access. The contractor shall provide mainframe computer operational maintenance support well as respond to system specific Help Desk calls and emails. The contractor shall safeguard sensitive GAO information, data, and materials. The contractor shall protect document storage areas; computer locations; and production processing and report distribution areas containing sensitive materials as well as manage storage, distribution, and disposal of sensitive materials.

k. Functional Systems Support (E/WM, FS, HCM, and TM Business Functions)

The contractor shall provide functional systems support including sharing expert knowledge of any functional feature or business logic-related aspects of a system. This requirement hinges on thorough understanding of inner workings of a system or the ability to promptly discover, share, and retain knowledge of the inner workings. GAO systems are organized in four EA segments: Engagement/Work Management (E/WM), Financial Services (FS), Human Capital Management (HCM), and Technology Management (TM).

I. BI Operational Maintenance and Support

GAO's Enterprise Data Warehouse and Business Intelligence (EDW/BI) program provides an enterprise and robust infrastructure that services end users with reporting and analytics capabilities. The program established a large-scale data warehouse through integration of disparate transactional data that exists in different systems within Engagement/Work Management, Human Capital, and Financial Services segments. In addition, the BI program delivers (a) fast analysis and synthesis of business information behind large volumes of data typically represented by user-friendly reports and charts that summarize the enterprise business operations, and (b) discovery of knowledge through analysis and mining that provides to decision makers non-obvious insights and foresights into the GAO operations.

The contractor shall provide end-to-end support including operational maintenance of the EDW/BI platform and applications that rely on the capabilities and infrastructure it provides. This includes, but is not limited to, requirements solicitation and management, and a full spectrum of application development functions and tasks such as deployment, archival, system administration, integration, data validation, testing, configuration management, and documentation. The contractor shall provide coordination among and across the development teams, if required, including exposing and/or consuming data and services. The contractor shall support the Federal staff-driven functions such as scheduling, coordination, and process governance associated with the EDW/BI platform and the application built on it.

m. Rapid Applications/Forms Automation Support

To answer GAO's need to quickly develop, operate, and archive smaller and/or purpose-built applications such as automated forms, all the while complying with rigorous IT standards and mandates, a common Rapid Application Development (RAD) platform based on Liferay Portal Enterprise delivers a very important building block for enterprise applications. The RAD platform provides underpinning technology to drive many important GAO applications that serve internal and external customers. These are efforts that typically last weeks and months as opposed to years

Because this service has not been in operation, no system is currently deployed using this technology. As such, there are no current examples in production. While the specific criteria for applicability of RAD is being defined, the rule of thumb is that the application is self-contained, smaller in scope, and routine in nature and can leverage the standard and common building blocks and library of components of the RAD platform. Applications built on the RAD platform may end up becoming mission essential functions as platform and GAO needs will evolve.

The contractor shall provide end-to-end support including operational maintenance of the RAD platform and applications built on top of the RAD platform. This includes, but is not limited to, requirements solicitation and management, the full spectrum of application development functions and tasks such as deployment, archival, system administration, integration, testing, configuration management, and documentation. Specific to testing, ISTS develops, maintains, and approves test plans and procedures that the contractor shall adhere to, e.g., use of automated tools such as WebInspect and Test Director for Quality Center.

The contractor shall provide coordination among and across the development teams if required including exposing and/or consuming data and services. The contractor shall support the Federal staff-driven functions such as scheduling, coordination, and process governance associated with the RAD platform and applications built in the RAD environment.

The Government estimates transitioning approximately 30 applications by the end of Fiscal Year 2014 and roughly 40 additional applications the following fiscal year. In addition, about 8 brand new applications are projected to be added annually. These estimates are subject to change based on the level of commitment and prioritization by ISTS and the agency.

n. Asset/Items Management (on-boarding, life, disposal)

GAO practices asset/items management as the business strategy to reduce IT costs and limit business and legal risk related to the ownership and use of software while maximizing IT responsiveness and end-user productivity. This function within applications support is different from IT Asset Management, targeting mostly tangible assets and practiced by other business units.

The contractor shall deliver support for applications-related assets and items such as applications inventory, modules, plug-ins, underpinning technology, software versions, licenses, and license benefits. This task must include the end-to-end life cycle from identification, on-boarding/acquisition, upkeep, and retirement/disposal of the controlled items. Tracking of these items is the primary function of this task and is to include associating, reviewing, and reporting on related metadata.

o. Systems documentation upkeep and maintenance

The contractor shall maintain and update systems documentation prescribed by and/or inferred from the GAO standards and policies such as the SDLC, ADM, and other policy and practice documents including process governance. These GAO standards and policies may be internally developed and/or mandated by various external standard-setting bodies. This includes, but is not limited to, technical systems documentation, requirements documentation, System Security Plan (SSP), Privacy Impact Assessment (PIA), and SOP. Where necessary and identified, missing or lacking breadth and/or depth, the contractor shall create new or enhance existing system documentation.

The contractor shall maintain system documentation securely and ensure access on a need-to-know basis. This is especially relevant to security-related and other systems architecture documentation.

p. Configuration Management

The contractor shall utilize the GAO source code repository, currently managed by Borland StarTeam, Apache Subversion, and Microsoft SourceSafe (used in Survey Support). The contractor shall follow applicable operating procedures standards. All source code and related

files for operational systems shall be accessed from these repositories where applicable and shall not be modified unless changes are authorized. The contractor shall document and disseminate all changes to the baseline prior to making those changes. This process is intended to manage the identification of proposed changes, analysis of the impact of these changes, and implementation under any task within the scope of this task order.

C.3.7.2 SURVEY SUPPORT SERVICES

GAO prepares and disseminates surveys in support of external audit engagements as well as for internal surveys of agency staff. These surveys are implemented as web-based data collection forms that survey respondents access using their web browser going to the URL that they are sent in an email message. Survey specialists in GAO's Applied Research and Methods (ARM) team design each survey and then use a Government-developed survey system, called QPL (http://qpl.gao.gov/), to create the files needed to operate these web forms when they are installed on a GAO web server. GAO operates about 100 web surveys at any time on one of three production web servers. The QPL system is also sometimes used by ARM staff to build a static collection of HTML files that are used to publicly report the results of a survey effort, and is called an "e-supplement."

This task encompasses contractor support for hosting QPL-generated web questionnaire forms on test, QA, and production web and database servers. This includes installing QPL-generated web form files, converting a respondent list from an Excel spreadsheet format to SQL for loading into a form web site MySQL database, applying HTML formatting to email messages that are sent from a form web site, archiving a form web site when the survey period ends, and deploying e-supplement files on a server for testing and later staging them for release on GAO's public web site. It also includes building and maintaining shell scripts and software tools to automate these activities, standardizing and documenting these activities, and using GAO ticketing systems to track these activities. And finally, it may include modifying one or more of the QPL-generated files to add a special feature to a particular web form project, or to modify existing projects that are running on production servers to accommodate an upgrade to the server software, such as PHP or MySQL. This task does not require support for designing survey questions, nor administering a survey while it is in the field (i.e., responding to questions from survey respondents), nor statistically analyzing the data that is gathered with a web survey form.

The following statistics within the Survey Support highlight the volume and types of activity during 2010 through 2012.

Year	Deployment	Update	Email	Archive	E-Supplement	Other	Total
2010	214	334	247	142	68	81	1086
2011	235	240	261	125	43	54	958
2012	130	157	163	129	61	51	691

The contractor shall use the following applications and systems in performing this function:

- Apache LAMP Stack.
- PHP/HTML/JavaScript/Ajax/YUI Library.
- MySQL and Oracle.
- SourceSafe and Subversion.
- WinSCP.
- Putty/PAgent.
- HomeSite.
- Questionnaire Programming Language (QPL).
- FrontRange ITSM, JobTracker, and JobTracker Work Order project and ticket tracking systems.

a. Web-Based Survey Support.

The contractor shall provide technical and operational support to GAO with respect to supporting the deployment and operation of QPL-generated web forms and e-supplement web sites. Activities include, but are not limited to:

- 1. Refreshing and recompiling QPL web questionnaire form projects or e-supplement projects that are submitted by ARM survey designers to make sure the most current QPL software is used when deployed on a test or production server.
- 2. Updating the project files in the SourceSafe version control system with the new or updated files.
- 3. Performing quality assurance checks on submitted projects to make sure they compile without errors, and that any respondent list submitted in a spreadsheet is reasonable and each data column has a target home in the questionnaire so that it may be processed into an SQL script that can be used to load the respondent information to the project database.
- 4. Deploy QPL web questionnaire form projects and e-supplement to test, QA, or production servers using SCP tools to copy web site files from version control to the server; and then only for only web questionnaire form projects, running the QPL-generated SQL script to build the project database and the respondent list SQL script to add respondent information.
- 5. Staging e-supplement files for public release and notifying contractors that support the publication of GAO report process that the e-supplement files are ready for release.
- 6. Setting up text and HTML versions of respondent email messages on a QPL project web site and set SQL queries to send individually customized messages to subsets of respondents as requested by an ARM survey specialist.
- 7. Archiving a project by putting a zipped copy of web site files and a zipped copy of the MySQL database dump file in the version control system, and then scratching the web site and database from the production server, and updating the project tracking system.

- 8. Managing routine task requests through GAO's "Job Tracker Work Order" web-based ticket system, and other custom or server maintenance tasks through the FrontRange ITSM ticket system.
- 9. Reporting summary information about web-survey support task requests and accomplishments to GAO managers.
- 10. On special projects, modifying QPL-generated web programs to add one or more special features, including possible changes to HTML, PHP, JavaScript, or SQL coding.
- 11. Researching functional and security implications of upgrades to new versions of underlying server software, primarily PHP and MySQL, before new versions are installed on GAO's production servers to identify any accommodations that may be required in the QPL code base and, if so, identify strategies for safely updating existing QPL projects without losing respondent data and, when approved, implement a plan to update the server software and QPL projects with minimal downtime.
- 12. Monitoring and optimizing the MySQL database server and planning and implementing upgrades of the live survey databases to new versions of MySQL and migrations of the live databases to new hardware.
- 13. Updating the web survey support process documentation on the web survey support wiki site, including standard operations for refreshing, deploying, and archiving QPL web survey sites; converting respondent lists in spreadsheets to SQL scripts; deploying e-supplement HTML files on a test server, and later staging the files for release on GAO's public web site; procedures for the safe shutdown of the QPL servers before a planned outage of GAO's computer center; and other standard support and maintenance tasks.

SECTION D - PACKAGING AND MARKING

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SECTION E - INSPECTION AND ACCEPTANCE

NOTE: The Section numbers in this TO correspond to the Section numbers in the Alliant Contract. Section E of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

Clause No	Clause Title	Date
52-246-5	Inspection of Services – Cost Reimbursement	(APR 1984)

E.2 INSPECTION AND ACCEPTANCE

Inspection and acceptance of all work performance, reports, and other deliverables under this TO shall be performed by Contracting Officer's Representative and the Client Technical Point of Contact.

E.3 SCOPE OF INSPECTION

All deliverables will be inspected for content, completeness, accuracy, and conformance to TO requirements by the FEDSIM COR and/or GAO Representative. Inspection may include validation of information or software through the use of automated tools, testing, or inspections of the deliverables, as specified in the TO. The scope and nature of this inspection will be sufficiently comprehensive to ensure the completeness, quality, and adequacy of all deliverables in terms of the TOR requirements.

E.4 BASIS OF ACCEPTANCE

The basis for acceptance shall be compliance with the requirements set forth in the TO, the contractor's proposal, and relevant terms and conditions of the contract. Deliverable items rejected shall be corrected in accordance with the applicable clauses.

For IT development/enhancements, the final acceptance will occur when all discrepancies, errors, or other deficiencies identified in writing by the Government have been resolved through documentation updates, program correction, or other mutually agreeable methods. This will occur through the use of the GAO Governance process.

Reports, documents, and narrative-type deliverables will be accepted when all discrepancies, errors, or other deficiencies identified in writing by the Government have been corrected. If the draft deliverable is adequate, the Government may accept the draft and provide comments for incorporation into the final version.

All of the Government's comments on deliverables must either be incorporated in the succeeding version of the deliverable, or the contractor must demonstrate to the Government's satisfaction why such comments should not be incorporated.

If the Government finds that a draft or final deliverable contains spelling errors, grammatical errors, or improper format, or otherwise does not conform to the requirements stated within this TO, the document may be immediately rejected without further review and returned to the contractor for correction and resubmission. If the contractor requires additional Government

<u>SECTION E - INSPECTION AND ACCEPTANCE</u>

guidance to produce an acceptable draft, the contractor shall arrange a meeting with the FEDSIM COR.

All deliverables provided to the Government over an MSR reporting period shall be listed, by full name, in the MSR that follows that period. The MSR will be used as the acceptance instrument for all deliverables listed in the MSR. Any exceptions or rejections to any deliverables or their content will be provided to the GAO TPOC so that they can be disclosed when MSR approval is requested by the COR. The GAO Performance Monitors will convene each month after delivery of the MSR and this forum will be used as a "last call" for any deliverable rejections with justification. If there are no causes for rejection against any deliverables listed in the MSR, to include the MSR, then the TPOC will provide written acceptance to the COR of MSR acceptance and, by default, all deliverable listed in the MSR for that reporting period will be accepted without changes. Any exceptions or rejections (with specific cause) are to be provided to the TPOC prior to TPOC acceptance of the MSR, no later than 3 business days after the Technical Monitor's meeting for that month. Exceptions or rejection of any deliverables will be handled in accordance with task order requirements.

NOTE: The Section numbers in this TO correspond to the Section numbers in the Alliant Contract. Section F of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

Clause No	Clause Title	Date
52.242-15	Stop-Work Order	(AUG 1989)
52.242-15	Alternate I	(APR 1984)

F.3 TASK ORDER PERIOD OF PERFORMANCE

The period of performance for this TO is a one-year base period and four, one-year options as follows:

Base Period: January 10, 2014 – January 9, 2015 Option Period 1: January 10, 2015 – January 9, 2016 Option Period 2: January 10, 2016 – January 9, 2017 Option Period 3: January 10, 2017 – January 9, 2018 Option Period 4: January 10, 2018 – January 9, 2019

F.4 PLACE OF PERFORMANCE

Place of Performance is the GAO Headquarters at 441 G Street, Washington, DC 20548 and/or the contractor's Government-approved location as appropriate to the contractor's proposal. Limited long-distance travel is expected to the 11 GAO Field Offices located around the Continental United States (CONUS) and the Alternate Computing Facility (ACF)/Disaster Recovery (DR) site.

F.5 DELIVERABLES

The following schedule of milestones will be used by the FEDSIM COR to monitor timely progress under this TO.

The following abbreviations are used:

NLT: No Later Than TOA: Task Order Award

PS: Project Start – January 10, 2014

All references to Days: Government Workdays

Deliverables are due the next Government workday if the due date falls on a holiday or weekend. The contractor shall submit the deliverables listed in the following table:

NUMBER	MILESTONE/ DELIVERABLE	TASK ORDER REFERENCE	PLANNED COMPLETION DATE
1	Project Kick Off Meeting	C.3.1.1	NLT 5 WD after PS
2	Project Kick Off Agenda	C.3.1.1	NLT 5 WD after PS
3	Monthly Status Report (MSR)	C.3.1.2	15 th of the subsequent month
4	Technical Status Meetings Minutes	C.3.1.3	One business day after conclusion of meeting
5	Budget Briefing	C.3.1.4	NLT 5 WD after invoice submission
6	IPT Meeting Agenda	C.3.1.5	As meetings are requested
7	Trip Reports	C.3.1.6	NLT 5 WD after trip
8	Updated Transition-In Plan	C.3.2	NLT 2 weeks after PS
9	Transition-Out Plan	C.3.3	NLT 90 calendar days prior to expiration of TO
10	Removed in Mod #16 ##		
11	Hardware Maintenance and Repair Report	C.3.4.3.2.1	Monthly
12	Integrated Master Schedule	C.3.5.1.1	Initial Delivery PS + 90 days with bi-monthly updates and sharing and monthly reporting to the Government
13	Service Report	C.3.5.2	As requested
14	Removed in Mod #16		•
15	Publishing Technical Support Weekly Activity Report, including meeting minutes and agenda	C.3.6.18.4	Weekly
16	Network Baseline Documentation	C.3.6.1.1	One week after change
17	Hardening/Configuration Guidelines	C.3.6.1.1	One week after change has been made; annual review
18	Standard Operating Procedures (SOPs) and System Documentation	C.3.6.1.1	One week after change to SOP has been made; annual review
19	Removed in Mod #16		
20	Removed in Mod #16		
21	Capacity Planning Documentation	C.3.6.1.2	Quarterly
22	Enterprise Data Comprehensive Inventory	C.3.7	Monthly
23	Database Team Quarterly Report (See Section J, Attachment KK for template)	C.3.5.5.8	Every three months
24	Reserved		
25	Enterprise Applications Maintenance and Support Report	C.3.7.1	Weekly
26	DM Application Monitoring Reports including uptime, Docs	C.3.5.5.10	Daily

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NUMBER	MILESTONE/ DELIVERABLE	TASK ORDER REFERENCE	PLANNED COMPLETION DATE
	Fusion automatic restarts, GAO Nightly Processing Application, and Oracle Servers Status		
27	COOP Events Report	C.3.5.5.10	One week after scheduled event
28	COOP Operational Documentation & Procedures	C.3.5.5.10	One week after change
29	DM File and Job Code content reports	C.3.5.5.10	Weekly
30	DM Benchmark Report	C.3.5.5.10	Weekly
31	Removed in Mod #16		
32	DM ITSM incident reports (open/closed tickets and problem boards, restore requests)	C.3.5.5.10	Monthly
33	MS Exchange Message Stats Reports	C.3.5.5.11	Monthly
34	MS Exchange Spotlight on Messaging activity report	C.3.5.5.11	Monthly
35	MS Exchange incident reports (open/closed tickets and problem boards, restore requests)	C.3.5.5.11	Monthly
36	Reports on Telecommunications Network Infrastructure and Services regarding Capacity, Performance, Availability, and Root Cause Analysis	C.3.5.5.12.1	Semi-annually and as requested
37	Updates to Telecommunications Network Infrastructure and Services Standard Operating Procedure list, analysis for accuracy, recommendations, changes, and creation of new SOPs. SOPs include but not limited to maintenance methodology, procedures and schedules (e.g. routine, non routine, and emergency).	C.3.5.5.12.1	One week after change to SOP has been made and a semi-annual review
38	Telecommunications/Data Center/Facilities drawings (e.g. rack elevation, topology, system models, and wiring diagrams).	C.3.5.5.2	Semi-annually and as requested
39	Test Plan & Procedures	C.3.7.1	As Requested
40	User guides for updated templates	C.3.5.18.4	Documentation revised with

NUMBER	MILESTONE/ DELIVERABLE	TASK ORDER REFERENCE	PLANNED COMPLETION DATE
	and GAO Product Templates		new/revised templates
41	PTS template inventory with versions and settings documentation	C.3.5.18.4	Updated with template revisions
42	Desktop Engineering Documentation	C.3.5.5.5	One week after change
43	COTS Update/Modification Plans	C.3.1.7	As Requested
44	Workflow Process Information	C.3.1.7	As Requested
45	Training Manuals and Technical User Guides	C.3.1.7	As Requested
46	Help Desk Report	C.3.4.2	Monthly
47	PDF document with redactions	F.5.1	NLT 10 WD after TOA or any modification
48	Enterprise Architecture Work Products	C.3.7	As requested
49	Added in Mod #16 Information Management Weekly Report	C.3.5.17.1	Weekly
50	VTC Metric Support Report	C.3.5.5.12.3	Monthly

F.5.1 PUBLIC RELEASE OF CONTRACT DOCUMENTS REQUIREMENT

The contractor agrees to submit, within ten workdays from the date of the Contracting Officer's execution of the initial TO, or any modification to the TO (exclusive of Saturdays, Sundays, and Federal holidays), a portable document format (PDF) file of the Fully Executed Document (see Section F, Deliverable 47) with all proposed necessary redactions, including redactions of any trade secrets or any commercial or financial information that it believes to be privileged or confidential business information, for the purpose of public disclosure at the sole discretion of GSA. The contractor agrees to provide a detailed written statement specifying the basis for each of its proposed redactions, including the applicable exemption under the Freedom of Information Act (FOIA), 5 U.S.C. § 552, and, in the case of FOIA Exemption 4, 5 U.S.C. § 552(b)(4), shall demonstrate why the information is considered to be a trade secret or commercial or financial information that is privileged or confidential. Information provided by the contractor in response to the contract requirement may itself be subject to disclosure under the FOIA. Submission of the proposed redactions constitutes concurrence of release under FOIA.

GSA will carefully consider all contractor's proposed redactions and associated grounds for nondisclosure prior to making a final determination as to what information in such executed documents may be properly withheld.

F.5.2 DELIVERABLES MEDIA

The contractor shall deliver all electronic versions by email and removable electronic media, as well as placing in the GAO designated repository. The following are the required electronic

formats, whose versions must be compatible with the latest, commonly available version on the market.

Text MS Word
Spreadsheets MS Excel
Briefings MS PowerPoint
Drawings MS Visio
Schedules MS Project

F.6 PLACE(S) OF DELIVERY

Electronic versions of unclassified deliverables and correspondence shall be delivered to the Contracting Officer's Representative (COR) at the following address:

GSA FAS AAS FEDSIM ATTN: Victor White COR

1800 F Street NW

Washington, DC 20405 Telephone: (202) 308-8055 Email: Victor.White@gsa.gov

Copies of all deliverables shall also be delivered to the GAO TPOC:

Zenobia B. Bingham Manager, Contract Management GAO/ISTS/BACG 441 G Street NW Washington, DC 20548

Telephone (Office): 202-512-6639 Telephone (Cell): 202-306-8207 Email: binghamz@gao.gov

Electronic copies of all correspondence or other documentation that affects cost, schedule, and /or scope shall also be delivered to FEDSIM CO:

Nydia Roman-Albertorio GSA FAS AAS FEDSIM 1800 F Street NW Washington, DC 20405

Telephone: (202) 285-9530

Email: nydia.roman-albertorio@gsa.gov

F.7 NOTICE REGARDING LATE DELIVERY/PROBLEM NOTIFICATION REPORT (PNR)

The contractor shall notify the FEDSIM COR via a Problem Notification Report (PNR) (see **Section J, Attachment VV**) as soon as it becomes apparent to the contractor that a scheduled delivery will be late. The contractor shall include in the PNR the rationale for late delivery, the expected date for the delivery, and the project impact of the late delivery. The FEDSIM COR will review the new schedule and provide guidance to the contractor. Such notification in no way limits any Government contractual rights or remedies including, but not limited to, termination.

NOTE: The Section numbers in this TO correspond to the Section numbers in the Alliant Contract. Section G of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

G.3.5 CONTRACTING OFFICER'S REPRESENTATIVE

The CO will appoint a COR for this TO through a COR Appointment Letter that will be provided to the contractor upon award (see **Section J, Attachment TT**). The COR will receive, for the Government, all work called for by the TO and will represent the CO in the technical phases of the work. The COR will provide no supervisory or instructional assistance to contractor personnel.

The COR is not authorized to change any of the terms and conditions, scope, schedule, and price of the Contract or the TO. Changes in the scope of work will be made only by the CO by properly executed modifications to the Contract or the TO.

G.3.5.1 CONTRACT ADMINISTRATION

Contracting Officer:

Nydia Roman-Albertorio GSA FAS AAS FEDSIM 1800 F Street NW Washington, DC 20405 Telephone: (202) 285-9530 Email: nydia.roman-albertorio

Contracting Officer's Representative:

Victor White GSA FAS AAS FEDSIM 1800 F Street NW Washington, DC 20405 Telephone: (202) 308-8055 Email: Victor.White@gsa.gov

Technical Point of Contact:

Zenobia B. Bingham Manager, Contract Management GAO/ISTS/BACG 441 G Street NW Washington, DC 20548

Telephone (Office): 202-512-6639 Telephone (Cell): 202-306-8207 Email: binghamz@gao.gov

G.9.6 INVOICE SUBMISSION

The contractor shall submit Requests for Payments in accordance with the format contained in General Services Administration Acquisition Manual (GSAM) 552.232-25, PROMPT PAYMENT (NOV 2009), to be considered proper for payment. In addition, the following data elements shall be included on each invoice.

Task Order Number: GSQ0014AJ0032

Paying Number: 21483745

FEDSIM Project Number: GA00632

Project Title: GAO IT Infrastructure and Operations

The contractor shall certify with a signed and dated statement that the invoice is correct and proper for payment.

The contractor shall provide invoice backup data in accordance with the contract type, including detail such as labor categories, rates, and quantities of labor hours per labor category.

The contractor shall submit invoices as follows:

The contractor shall utilize FEDSIM's electronic Tracking and Ordering System (TOS) to submit invoices. The contractor shall submit invoices electronically by logging onto the following link (requires Internet Explorer to access the link):

https://portal.fas.gsa.gov

Select *Vendor Support*, log in using your assigned ID and password, then click on *Create Invoice*. The TOS Help Desk should be contacted for support at 877-472-4877 (toll free). By utilizing this method, no paper copy of the invoice shall be submitted to GSA FEDSIM or the GSA Finance Center. However, the FEDSIM COR may require the contractor to submit a written "hardcopy" invoice with the client's certification prior to invoice payment.

G.9.6.1 INVOICE REQUIREMENTS

The contractor may invoice the fixed fee on a monthly basis. The monthly fixed fee invoiced shall be proportionate to the amount of labor expended for the month invoiced.

The contractor shall submit simultaneous copies of the invoice to both GSA and the client POC. Receipts are provided on an as requested basis.

The final invoice is desired to be submitted within six months of project completion.

G.9.6.1.1 COST-PLUS-FIXED-FEE (CPFF) CLINS

The contractor may invoice monthly on the basis of cost incurred for the CPFF CLINs. The invoice shall include the period of performance covered by the invoice and the CLIN number and title. All hours and costs shall be reported by CLIN element (as shown in **Section B**), by contractor employee, and shall be provided for the current billing month and in total from project inception to date. The contractor shall provide the invoice data in spreadsheet form with the following detailed information. The listing shall include separate columns and totals for the current invoice period and the project to date.

- a. Employee name (current and past employees).
- b. Employee company labor category.
- c. Employee Alliant labor category.
- d. Monthly and total cumulative hours worked.
- e. Fixed fee.
- f. Cost incurred not billed.
- g. Current approved forward pricing rate agreement in support of indirect costs billed.

All cost presentations provided by the contractor shall also include overhead charges, and General and Administrative (G&A) charges and shall also include the overhead and G&A rates being applied.

G.9.6.1.2 COST REIMBURSABLE CLINs (FOR SUBCONTRACTOR LABOR)

The contractor may invoice monthly on the basis of cost incurred for the Cost Reimbursable Subcontractor Labor CLINs. The invoice shall include the period of performance covered by the invoice and the CLIN number and title. All hours and costs shall be reported by CLIN element (as shown in Section B), by subcontractor, and shall be provided for the current billing month and in total from project inception to date. The contractor shall provide the invoice data in spreadsheet form with the following detailed information. The listing shall include separate columns and totals for the current invoice period and the project to date.

- a. Subcontractor Employee name (current and past employees)
- b. Subcontractor Employee company labor category
- c. Monthly and total cumulative hours worked
- d. Cost incurred not billed

All cost presentations provided by the contractor shall also include indirect handling charges applied to subcontractor labor.

G.9.6.1.3 ANCILLARY PRODUCT/SERVICES

The contractor may invoice monthly on the basis of cost incurred for the Ancillary Products/Service CLIN. The invoice shall include the period of performance covered by the invoice and the CLIN number and title and Interagency Agreement (IA) number. In addition, the

contractor shall provide the following detailed information for each invoice submitted, as applicable. Spreadsheet submissions are required.

- a. Ancillary Products purchased.
- b. Request to Initiate Purchase number or identifier.
- c. Date accepted.
- d. Associated CLIN.
- e. Project-to-date totals by CLIN.
- f. Cost incurred not billed.
- g. Remaining balance of the CLIN.

All cost presentations provided by the contractor shall also include applicable indirect charges and associated Fee (if proposed and awarded within the basic task order).

G.9.6.1.4 TRAVEL

The contractor may invoice monthly on the basis of cost incurred for cost of travel comparable with the Federal Travel Regulation (FTR). The invoice shall include the period of performance covered by the invoice, the CLIN number and title, and the IA number. Separate worksheets, in MS Excel format, shall be submitted for travel.

<u>CLIN/Task Total Travel</u>: This invoice information shall identify all <u>cumulative</u> travel costs billed by CLIN/Task. The <u>current</u> invoice period's travel details shall include separate columns and totals and include the following:

- a. Travel Authorization Request number or identifier, approver name, and approval date.
- b. Current invoice period.
- c. Names of persons traveling.
- d. Number of travel days.
- e. Dates of travel.
- f. Number of days per diem charged.
- g. Per diem rate used.
- h. Total per diem charged.
- i. Transportation costs.
- j. Total charges.
- k. Explanation of variances exceeding 10% of the approved versus actual costs.
- 1. Indirect Charges (as applicable).

NOTE: The Section numbers in this TO correspond to the Section numbers in the Alliant Contract. Section H of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

H.2 KEY PERSONNEL

The following are the minimum personnel who shall be designated as "Key." The Government does not intend to dictate the composition of the ideal team to perform this TO. Therefore, the Government encourages and will evaluate additional Key Personnel as proposed by the contractor. The contractor shall provide named Key individuals with their proposal for the following functional categories:

- Project Manager
- Operations/Network Manager
- Information Management Lead
- Web Support Services Lead
- Enterprise Application Support Lead

The Government desires that all proposed Key Personnel be assigned for the duration of the TO. The contractor's key personnel shall be available at Project Start.

H.2.3 PROJECT MANAGER

The Contractor shall provide a Project Manager (PM) to serve as the Government's primary point-of-contact and to provide overall leadership and guidance for all Contractor personnel assigned to the task order. The PM is ultimately responsible for the quality and efficiency of the task order to include both technical issues and business processes. The PM shall be an employee of the prime Contractor, no later than the PS date in **Section F**. The PM shall assign tasking to Contractor personnel, supervise on-going technical efforts, and manage overall task order performance. This individual shall have the ultimate authority to commit the Contractor's organization and make decisions for the Contractor's organization in response to Government issues, concerns, or problems. This person shall be readily available to respond to Government questions, concerns, and comments, as well as be proactive in alerting the Government to potential contractual or programmatic issues.

The PM shall have a Secret clearance at the time of the designated TOR proposal response date. The PM shall be Project Management Professional (PMP) certified at the time of the designated TOR proposal response date.

It is desirable that the PM has the following experience as a Project Manager managing environments similar (in both size and scope) to that of the task order:

a. Demonstrated experience in the management and control of complex information systems architectures involving multiple disparate database, network, and communications subsystems.

- b. Demonstrated leadership experience in a networking and customer service environment with a significant number of staff (90 persons or more).
- c. Demonstrated supervisory experience over operations which encompass user and network systems; integration, training, and satellite technology in diverse operating environments with people of various job categories and skills.
- d. Demonstrated experience in a quality assurance environment that includes, at a minimum, knowledge of: customer satisfaction tracking; user complaint and monitoring programs; and quality control (QC) programs.
- e. Demonstrated experience in manpower utilization, procurement, training, problem resolution, and employee relations (including subcontractors).
- f. Demonstrated experience managing service-oriented requirements involving SAMs and metrics.

H.2.4 OPERATIONS/NETWORK MANAGER

The contractor shall provide an Operations/Network Manager who shall provide overall management and technical leadership for GAO network operations to include the GAO LAN (approximately 3,200 users).

It is desirable that the Operations/Network Manager has the following experience related to the requirements of TOR:

- a. Demonstrated experience leading and supervising teams of various job categories and skills in a networking environment in similar size and scope as GAO.
- b. Demonstrated experience with LAN/WAN architecture integration.
- c. Demonstrated Experience with investigating and successfully implementing and integrating new technologies into a network environment.
- d. Demonstrated Experience managing personnel in the following areas: Storage Area Networks, enterprise security, Network Management, Microsoft desktop and server operating systems, Directory Services, Linux, Email, wireless technologies, application distribution technologies, and Internet services.

H.2.5 <u>INFORMATION MANAGEMENT LEAD</u>

The contractor shall provide an Information Management Lead who is responsible for the information about GAO products, including taxonomy and thesaurus, and agency contacts, included in GAO's product and content databases. It is desirable that the Information Management Lead have the following demonstrated experience and/or knowledge related to the requirements of TOR:

- a. Demonstrated experience leading, training, and managing a staff performing requirements similar to those in the TOR and achieving a high level of customer satisfaction.
- b. Demonstrated experience communicating with both technical and non-technical staff in documenting and resolving data entry and processing errors.
- c. Demonstrated experience working in a fast-paced customer service environment.

- d. Demonstrated experience analyzing information management processes and procedures, identifying process improvements, and implementing efficiencies.
- e. Demonstrated experience analyzing and documenting problems with databases and systems.
- f. Demonstrated experience with metadata and taxonomy creation and use.

H.2.6 WEB SUPPORT SERVICES LEAD

The contractor shall provide a Web Support Services Lead to manage and coordinate web services activities. It is desirable that the Web Support Services Lead have the following demonstrated experience and/or knowledge related to the requirements of TOR:

- a. Demonstrated experience with the design, development and documentation of websites, web applications, and web services.
- b. Demonstrated experience managing, supervising, and training staff in web-related services while fostering a collaborative work environment.
- c. Demonstrated experience analyzing network and/or database interaction supporting a large internet presence requiring high availability.
- d. Demonstrated knowledge of Government Section 508 standards as applied to agency webbased products and services.
- e. Demonstrated knowledge of site usability and information architecture best-practices.
- f. Demonstrated experience with website quality assurance testing and implementation.
- g. Demonstrated knowledge of the operating systems, programs, and software typically used to deliver web-related services in a mixed Windows/Linux environment employing Apache web servers and Oracle and MySQL databases, e.g., PHP, Perl Apache server, UNIX/LINUX, Internet/Intranet design and optimization, general internet/intranet security protocols, and search engine management.
- h. Demonstrated experience working with content management systems.

H.2.7 ENTERPRISE APPLICATION SUPPORT LEAD

The contractor shall provide an Enterprise Applications Support Lead who will be the contractor's lead for the tasks identified in the Enterprise Applications Support and Survey Support Services portions of Section C.

The focus of Enterprise Applications Support is to provide ongoing application development and maintenance support for the installed base of GAO custom, COTS, GOTS, open source applications, including web-based resources such as the intranet/internet and SAAS solutions. See **Section J, Attachment I** for the Applications Inventory.

It is desirable The Enterprise Applications Support Lead have demonstrated experience related to the requirements of TOR:

- a. Develop and evaluate system integration and interface requirements.
- b. Develop functional requirements.
- c. Develop logical and physical database designs
- d. Develop and evaluate design proposals.

- e. Develop and evaluate system programming efforts.
- f. Facilitate and execute system prototyping and usability testing.
- g. Develop and execute quality assurance test plans.
- h. Development of system and user documentation.
- i. Conduct root cause analysis and post implementation reviews.
- j. Manage the operations and maintenance of diverse multiple concurrent software enterprise applications.
- k. Manage staff with various application development and maintenance skill sets consistent with the types of applications, tools, and technologies outlined in **Section J**, **Attachment I** for the Applications Inventory.
- 1. Use of SDLC-related tools and utilities.
- m. Experience with group facilitation and consensus building during requirements definition and other group activities.

H.2.8 KEY PERSONNEL SUBSTITUTION

The contractor shall not replace any personnel designated as Key Personnel without the written concurrence of the CO. Prior to utilizing other than the Key Personnel specified in the proposal in response to this TOR, the contractor shall notify the Government CO and the COR. This notification shall be no later than ten calendar days in advance of any proposed substitution and shall include justification (including resume(s) and labor category of proposed substitution(s)) in sufficient detail to permit evaluation of the impact on TO performance.

Substitute personnel qualifications shall be equal to, or greater than, those of the personnel being substituted. If the Government CO and the COR determine that the proposed substitute personnel is unacceptable, or that the reduction of effort would be so substantial as to impair the successful performance of the work under the TO, the contractor may be subject to default action as prescribed by FAR 52.249-6, Termination (Cost Reimbursement).

H.5 GOVERNMENT-FURNISHED INFORMATION (GFI)

GAO will provide GFP and GFI including GAO-owned equipment and tools and third party-provided services, to include Maintenance and License Agreements (paid in advance with part numbers, see **Section J, Attachment W** for listings of GFI) at Project Start.

H.7 <u>SECURITY CONSIDERATIONS</u>

The GAO physical environment and network applications are not classified. All employees on the contract who require access to information, property, or other assets or resources under the authority or control of GAO must either be U.S. citizens or have lawful U.S. permanent resident status. It is the responsibility of the contractor to ensure (via E-Verify) that all employees on the contract meet the citizenship requirements and that proof of U.S. citizenship, permanent resident status, or employment authorization is provided to GAO's Office of Security (OS) upon request.

The Contractor shall ensure that all employees assigned to this task order have passed, as a minimum, a background security investigation. GAO will perform a local background check on

all Contractor employees before coming in the building. The Contractor shall ensure that assigned personnel that require Secret clearance are properly cleared prior to performing any work under this Task Order. See **Section J, Attachment XX** for GAO's security procedures.

Only personnel with GAO validated Secret clearances can perform work on GAO's SIPRNET (see Section J, Attachment K).

The GAO Security Clearance Online Tracking System (SCOTS) database subproject requires a High Risk Position of Trust background investigation (SSBI) per the DD254.

Additionally, the Contractor shall be responsible for maintaining their staff's security clearances previously cleared through GAO's Office of Security.

The Contractor shall safeguard classified project material in accordance with GSA ADM P 1025.2C, Information Security Program. The Contractor shall perform the appropriate background investigations on its personnel according to the clearance and position-of-trust level designations designated by GAO's Security Office. Additionally, Contractor personnel shall not perform work on systems or subprojects which require SSBI or NACLC investigations on an interim basis without an explicit authorization from GAO's Security office.

Contractor personnel may become aware of data pertaining to Contractors or services relating to or residing on systems utilized by GAO. Contractor personnel shall not obtain, divulge, or use this data for any purposes other than to support GAO. Under no circumstances shall Contractor personnel use this information for personal or Contractor gain. Data the Contractor produces as a result of this effort shall become the property of the Government and the Contractor shall protect this data at the appropriate security level identified.

DD254 REQUIREMENTS

A Department of Defense Contract Security Classification Specification Form 254 is required for this Task Order. All Contractor facility clearance/level of safeguarding shall be indicated on the form DD254. The Contractor's cognizant Security Officer (SO) shall work in conjunction with the geographically corresponding Defense Security Service (DSS) office listed on the DD254 with respect to all Contractor clearance processing.

Note: The Contractor shall adhere to the DD254 requirements concerning GAO's progressive adoption of HSPD-12 requirements. See **Section J, Attachment K** for the Form DD 254.

H.9 ORGANIZATIONAL CONFLICT OF INTEREST AND NON-DISCLOSURE REQUIREMENTS

H.9.1 ORGANIZATIONAL CONFLICT OF INTEREST

If the contractor has or is currently providing support or anticipates providing support to GAO that creates or represents an actual or potential organizational conflict of interest (OCI), the contractor shall immediately disclose this actual or potential OCI in accordance with FAR

Subpart 9.5. The contractor is also required to complete and sign an Organizational Conflict of Interest Statement in which the contractor (and any subcontractors, consultants, or teaming partners) agrees to disclose information concerning the actual or potential conflict with any proposal for any solicitation relating to any work in the TO. All actual or potential OCI situations shall be identified and addressed in accordance with FAR Subpart 9.5.

H.9.2 NON-DISCLOSURE REQUIREMENTS

If the contractor acts on behalf of, or provides advice with respect to any phase of an agency procurement, as defined in FAR 3.104-4, then the contractor shall ensure that all its personnel (to include subcontractors, teaming partners, and consultants) who will be personally and substantially involved in the performance of the TO:

- a. Execute and submit a Corporate Non-Disclosure Agreement (NDA) Form (Section J, (insert Attachment reference)) prior to the commencement of any work on the TO, and
- b. Are instructed in the FAR 3.104 requirements for disclosure, protection, and marking of contractor bid or proposal information, or source selection information.

All proposed replacement contractor personnel also must submit an NDA and be instructed in the requirements of FAR 3.104. Any information provided by contractors in the performance of this TO or obtained by the Government is only to be used in the performance of the TO. The contractor shall put in place appropriate procedures for the protection of such information and shall be liable to the Government for any misuse or unauthorized disclosure of such information by its personnel, as defined above.

H.14 <u>SECTION 508 COMPLIANCE REQUIREMENTS</u>

Unless the Government invokes an exemption, all Electronic and Information Technology (EIT) products and services proposed shall fully comply with Section 508 of the Rehabilitation Act of 1973, per the 1998 Amendments, 29 United States Code (U.S.C.) 794d, and the Architectural and Transportation Barriers Compliance Board's Electronic and Information Technology Accessibility Standards at 36 Code of Federal Regulations (CFR) 1194. The contractor shall identify all EIT products and services proposed, identify the technical standards applicable to all products and services proposed and state the degree of compliance with the applicable standards. Additionally, the contractor must clearly indicate where the information pertaining to Section 508 compliance can be found (e.g., Vendor's or other exact web page location). The contractor must ensure that the list is easily accessible by typical users beginning at time of award.

H.16 COST ACCOUNTING SYSTEM

The adequacy of the contractor's accounting system and its associated internal control system, as well as contractor compliance with the Cost Accounting Standards (CAS), affect the quality and validity of the contractor data upon which the Government must rely for its management oversight of the contractor and contract performance. Prior to the award of a TO the CO shall verify the validity of the contractor's cost accounting system for receipt of a cost type contract. Thereafter, the contractor is required to certify to the CO no later than 30 calendar days prior to

the exercise of any options the continued validity of their accounting system. The contractor's cost accounting system shall be adequate during the entire period of performance and shall permit timely development of all necessary cost data in the form required by the contract.

H.18 PURCHASING SYSTEMS

The objective of a contractor purchasing system assessment is to evaluate the efficiency and effectiveness with which the contractor spends Government funds and complies with Government policy with subcontracting.

Prior to the award of a TO the CO shall verify the validity of the contractor's purchasing system. Thereafter, the contractor is required to certify to the CO no later than 30 calendar days prior to the exercise of any options the validity of their purchasing system. Additionally, if reviews are conducted of the purchasing system after the exercise of the option, the contractor shall provide the results of the review to the CO within 10 workdays from the date the results are known to the contractor.

H.23 TRAVEL

H.23.1 TRAVEL REGULATIONS

Contractor costs for travel will be reimbursed at the limits set in the following regulations (see FAR 31.205-46):

a. Federal Travel Regulations (FTR) - prescribed by the GSA, for travel in the contiguous U.S.

H.23.2 TRAVEL AUTHORIZATION REQUESTS

Before undertaking travel to any Government site or any other site in performance of this TO, the contractor shall have this travel approved by, and coordinated with, the FEDSIM COR. Notification shall include, at a minimum, the number of persons in the party, traveler name, destination, duration of stay, purpose, and estimated cost. Prior to any long distance travel, the contractor shall prepare a Travel Authorization Request for Government review and approval. Long distance travel will be reimbursed for the cost of travel comparable with the Federal Travel Regulations (FTR).

Requests for travel approval shall:

- a. Be prepared in a legible manner.
- b. Include a description of the travel proposed including a statement as to purpose.
- c. Be summarized by traveler.
- d. Identify the TO number.
- e. Identify the CLIN and Interagency Agreement account associated with the travel.
- f. Be submitted in advance of the travel with sufficient time to permit review and approval.

SECTION H – SPECIAL CONTRACT REQUIREMENTS

The contractor shall use only the minimum number of travelers and rental cars needed to accomplish the task(s). Travel shall be scheduled during normal duty hours whenever possible.

H.24 ANCILLARY PRODUCTS/SERVICES

The Government may require the contractor to purchase hardware, software, and related supplies critical and related to the services being acquired under the TO. Such requirements will be identified at the time a TOR is issued or may be identified during the course of a TO by the Government or the contractor. When identified, the contractor shall submit to the FEDSIM COR a Request to Initiate Purchase (RIP) (see **Section J, Attachment L**), and conduct the purchase in accordance with the contractor's Government approved purchasing system. The RIP shall include the purpose, specific items, estimated cost, cost comparison, and rationale. The contractor shall not make any purchases without an approved RIP from the COR.

H.25 HARDWARE/SOFTWARE MAINTENANCE AGREEMENTS

H.25.1 The Government understands that commercial software tools that may be purchased in furtherance of this TO as described in **Section H.24** and as contemplated in the Ancillary Products and Services CLINs in **Section B.7** may be subject to commercial agreements which may take a variety of forms, including without limitation licensing agreements, terms of service, maintenance agreements, and the like, whether existing in hard copy or in an electronic or online format such as "clickwrap" or "browsewrap" (collectively, "software agreements"). For purposes of this TO, the Software Supplier Agreements are "collateral agreements" within the meaning of the FAR clause at 52.227-14(c)(2).

H.25.2 The contractor shall ensure that any proposed Supplier Agreements allow the associated software and services to be used as necessary to achieve the objectives of this TO. The contractor shall cooperate with the Government, including negotiations with the licensor as appropriate, to ensure compliance with this Section. Without limiting the generality of the foregoing, a compliant Supplier Agreement shall permit all of the following at no extra charge to the Government: (a) access and use by support contractors, including a successor contractor upon termination or expiration of this TO; (b) access and use by employees of other Federal, state, and local law enforcement agencies; (c) transfer to a different data center and/or a successor contractor's cloud; and (d) the creation of derivative works that shall be subject to at least the same rights as set forth in subparagraphs (a) through (c) above. The above rights constitute "other rights and limitations" as contemplated in subparagraph (d) of the FAR clause at 52.227-14, Rights In Data – General (May 2014), Alternate III (Dec 2007).

H.26 GAO STANDARDS OF CONDUCT

a. The Contractor is responsible for the behavior/conduct of its employees and shall set high standards of employee competency, conduct, appearance and integrity. The Contractor shall take any disciplinary action necessary. All Contractor employees, including Subcontractors, are expected to follow standards of behavior that reflect credit on their employer and the Federal Government.

SECTION H – SPECIAL CONTRACT REQUIREMENTS

- b. The Government may initiate a disciplinary inquiry through the Contracting Officer for anyone who violates these standards of conduct. This may result in a request to remove the individual in question. Decisions may be based upon incidents involving the types of misconduct or delinquency listed below.
- c. The following is merely illustrative and does not contain an exhaustive list of causes that could lead to dismissal or disciplinary action.
 - 1. Violation of the Regulations Governing GAO buildings and Grounds (4CFR 25.1).
 - 2. Negligence on duty. This includes sleeping on duty; unreasonable socializing; unreasonable delays or failure to carry out assigned tasks; and unreasonably conducting personal business during official time.
 - 3. Falsification or unlawful concealment, removal, mutilation, or destruction of any official documents or records. Any incident involving the willful omission of information from official documents or records to conceal material facts from the Government.
 - 4. Disorderly conduct, use of abusive or offensive language, quarreling, intimidation by words or actions, or fighting. Participation in disruptive activities that interfere with the normal operations of the Government.
 - 5. Selling, consuming, or being under the influence of intoxicants, drugs, or substances that produce similar effects.
 - 6. The improper use of official authority.
 - 7. Unauthorized use of communications equipment or Government property.
 - 8. Possession or use of a weapon.
 - 9. Violation of GAO security procedures, special orders, or regulations.
 - 10. The improper use of Contractor or GAO credentials.
 - 11. Use of Internet, computer equipment, and/or network resources to access pornography websites, or to create, download, view, store, copy, or send explicit or sexually oriented materials.

H.27 TELECOMMUTING POLICY FOR CONTRACTOR PERSONNEL

Contractor personnel, who are assigned at the start of the contract to work at GAO's facilities, may perform their duties in support of this Task Order via telecommuting with approval of the GAO Contract Management Team (CMT) or the GAO Group Directors who have been delegated the responsibility to develop and negotiate the performance terms and conditions for each telecommuting contractor staff.

H.28 INTELLECTUAL PROPERTY RIGHTS

The existence of any patent, patent application or other intellectual property right that encumbers any deliverable must be disclosed in writing on the cover letter that accompanies the delivery. If no such disclosures are provided, the data rights provisions in FAR 52.227-14 apply. The Software Agreements referenced in **Section H.25**, amended as contemplated therein, shall be deemed to constitute such disclosure with regard to their associated commercial software tools

SECTION H – SPECIAL CONTRACT REQUIREMENTS

and shall prevail over any inconsistent provision in FAR 52.227-14 to the extent of such inconsistency.

NOTE: The Section numbers in this TO correspond to the Section numbers in the Alliant Contract. Section I of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

I.2 FAR 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This TO incorporates one or more clauses by reference with the same force and effect as if they were given in full text. Upon request the CO will make their full text available. Also, the full text of a provision may be accessed electronically at:

FAR website: https://www.acquisition.gov/far/

Clause No	Clause Title	Date
52.204.10	Reporting Executive Compensation and First Tier	(JUN 2013)
	Subcontract Awards	
52.215-21	Requirements for Cost or Pricing Data or Information	(Oct 2010)
	Other than Cost or Pricing Data – Modifications	
52.216-8	Fixed Fee	(Jun 2011)
52.217-8	Option to Extend Services	(Nov 1999)
	Fill-In Date: 30 days	
52.217-9	Option to Extend the Term of the Contract	(Mar 2000)
	Fill-in Date: 1) 30 days before TO expiration; 2) 60;	
	3) 5 years.	
52.219-8	Utilization of Small Business Concerns	(Jan 2011)
52.222-54	Employment Eligibility Verification	(JUL 2012)
52.223-15	Energy Efficiency in Energy Consuming Products	(Dec 2007)
52.223-16	IEEE 1680 Standard for the Environmental Assessment	(Dec 2007)
	of Personal Computer Products	
52.227-14	Rights In Data – General Alternate II	(Dec 2007)
52.227-15	Representation of Limited Rights Data and Restricted	(Dec 2007)
	Computer Software	
52.227-21	Technical Data Declaration Revision and Withholding	(Dec 2007)
	of Payment – Major Systems	
52.232-18	Availability of Funds	(Apr 1984)
52.232-22	Limitation of Funds	(Apr 1984)
52.232-99	Providing Accelerated Payments to Small Business	(July 2013)
	Subcontractors (DEVIATION)	
52.244-6	Subcontracts for Commercial Items	(Dec 2010)
52.251-1	Government Supply Sources	(APR
		2012)

I.3 GENERAL SERVICES ADMINISTRATION ACQUISITION MANUAL (GSAM), INCORPORATED BY REFERENCE

The full text of a provision may be accessed electronically at:

GSAM website: https://www.acquisition.gov/gsam/gsam.html

Clause No	Clause Title	Date
552.232.25	Prompt Payment	(NOV 2009)
552.239-71	Security Requirements for Unclassified Information Technology Resources (GSA Orders only)	(JAN 2012)

I.3.1 GSAM CLAUSES INCORPORATED BY FULL TEXT

GSAM 552.232-39 UNFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUL 2015)

- a. Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any [commercial supplier agreement (as defined in 502.101)] that includes any [language, provision, or] clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:
 - 1. Any such [language, provision, or] clause is unenforceable against the Government.
 - 2. Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the [commercial supplier agreement. If the commercial supplier agreement] is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.
 - 3. Any such [language, provision, or] clause is deemed to be stricken from the [commercial supplier agreement].
- b. Paragraph a of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

(End of clause)

GSAM 552.232-78 COMMERCIAL SUPPLIER AGREEMENTS – UNENFORCEABLE CLAUSES (JUL 2015)

a. When any supply or service acquired under this contract is subject to a commercial supplier agreement, the following language shall be deemed incorporated into the

commercial supplier agreement. As used herein, "this agreement" means the commercial supplier agreement:

- 1. Notwithstanding any other provision of this agreement, when the end user is an agency or instrumentality of the U.S. Government, the following shall apply:
 - i. Applicability. This agreement is part of a contract between the commercial supplier and the U.S. Government for the acquisition of the supply or service that necessitates a license (including all contracts, task orders, and delivery orders not using FAR Part 12).
 - ii. End user. This agreement shall bind the ordering activity as end user but shall not operate to bind a Government employee or person acting on behalf of the Government in his or her personal capacity.
 - iii. Law and disputes. This agreement is governed by Federal law. (A) Any language purporting to subject the U.S. Government to the laws of a U.S. state, U.S. territory, district, or municipality, or foreign nation, except where Federal law expressly provides for the application of such laws, is hereby deleted. (B) Any language requiring dispute resolution in a specific forum or venue that is different from that prescribed by applicable Federal law is hereby deleted. (C) Any language prescribing a different time period for bringing an action than that prescribed by applicable Federal law in relation to a dispute is hereby deleted.
 - iv. Continued performance. If the supplier or licensor believes the ordering activity to be in breach of the agreement, it shall pursue its rights under the Contract Disputes Act or other applicable Federal statute while continuing performance as set forth in 52.233-1 Disputes.
 - v. Arbitration; equitable or injunctive relief. In the event of a claim or dispute arising under or relating to this agreement, (A) binding arbitration shall not be used unless specifically authorized by agency guidance, and (B) equitable or injunctive relief, including the award of attorney fees, costs or interest, may be awarded against the U.S. Government only when explicitly provided by statute (e.g., Prompt Payment Act or Equal Access to Justice Act).
 - vi. Additional terms.
 - a. This commercial supplier agreement may unilaterally incorporate additional terms by reference. Terms may be included by reference using electronic means (e.g., via web links, click and accept, etc.). Such terms shall be enforceable only to the extent that:
 - 1. When included by reference using electronic means, the terms are readily available at referenced locations; and
 - 2. Terms do not materially change Government obligations; and
 - 3. Terms do not increase Government prices; and
 - 4. Terms do not decrease overall level of service; and
 - 5. Terms do not limit any other Government right addressed elsewhere in this contract.
 - b. The order of precedence clause of this contract notwithstanding, any software license terms unilaterally revised subsequent to award that is

- inconsistent with any material term or provision of this contract is not enforceable against the Government.
- vii. No automatic renewals. If any license or service tied to periodic payment is provided under this agreement (e.g., annual software maintenance or annual lease term), such license or service shall not renew automatically upon expiration of its current term without prior express Government approval.
- viii. Indemnification. Any clause of this agreement requiring the commercial supplier or licensor to defend or indemnify the end user is hereby amended to provide that the U.S. Department of Justice has the sole right to represent the United States in any such action, in accordance with 28 U.S.C. 516.
 - ix. Audits. Any clause of this agreement permitting the commercial supplier or licensor to audit the end user's compliance with this agreement is hereby amended as follows: (A) Discrepancies found in an audit may result in a charge by the commercial supplier or licensor to the ordering activity. Any resulting invoice must comply with the proper invoicing requirements specified in the underlying Government contract or order. (B) This charge, if disputed by the ordering activity, will be resolved through the Disputes clause at 52.233-1; no payment obligation shall arise on the part of the ordering activity until the conclusion of the dispute process. (C) Any audit requested by the contractor will be performed at the contractor's expense, without reimbursement by the Government.
 - x. Taxes or surcharges. Any taxes or surcharges which the commercial supplier or licensor seeks to pass along to the Government as end user will be governed by the terms of the underlying Government contract or order and, in any event, must be submitted to the Contracting Officer for a determination of applicability prior to invoicing unless specifically agreed to otherwise in the Government contract.
- xi. Non-assignment. This agreement may not be assigned, nor may any rights or obligations thereunder be delegated, without the Government's prior approval, except as expressly permitted under the clause at 52.232-23, Assignment of Claims.
- xii. Confidential information. If this agreement includes confidentiality clause, such clause is hereby amended to state that neither the agreement nor the Federal Supply Schedule price list shall be deemed "confidential information." Issues regarding release of "unit pricing" will be resolved consistent with the Freedom of Information Act. Notwithstanding anything in this agreement to the contrary, the Government may retain any confidential information as required by law, regulation or its internal document retention procedures for legal, regulatory or compliance purposes; provided, however, that all such retained confidential information will continue to be subject to the confidentiality obligations of this agreement.
- 2. If any provision of this agreement conflicts or is inconsistent with the preceding subparagraph (a)(1), the provisions of subparagraph (a)(1) shall prevail to the extent of such inconsistency.]

(End of clause)

SECTION J – LIST OF ATTACHMENTS

NOTE: The Section numbers in this TO correspond to the Section numbers in the Alliant Contract. Section J of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

J.1 LIST OF ATTACHMENTS

Letter	Attachment
A	REMOVED AT AWARD
В	REMOVED AT AWARD
С	Travel Authorization Template (electronically attached .xls)
D	REMOVED
Е	Revised - Service Area Metrics (SAMs)- Updated through Mod #16
F	2012 Update to GAO Strategic Plan 2010 to 2015
	2013 Segment Roadmap Views:
	2013 Financial Services Roadmap
G	2013 Engagement and Work Management Roadmap
	2013 Human Capital Roadmap
	2013 Technology Management Roadmap (updated resolution in attachment G.1)
G.1	Technology Management Roadmap
Н	A Guide to CAB Meeting SCR Process
I	Applications Inventory
J	Devices in Field Office
K	DOD Contract Security Classification Specification Form DD 254
L	Request to Initiate Purchase (RIP)
M	GAO Current Inventory
N	GAO Customer Satisfaction Survey
N.1	GAO Annual Customer Satisfaction Survey Results_2013
О	GAO EA Management Maturity Framework (Version 2.0) Guidance
P	GAO Form 115 User Guide
Q	GAO IT Strategy – Executive Summary
R	GAO Order 0510.2 Information Systems Security Policy
S	Revised - GAO Organization Chart
T	GAO Strategic Plan 2010 to 2015
U	GAO's Lines of Business & Architecture Segments
V	GAO's Web Content Management Executive Summary Documentation
W	Revised - Government Furnished Information
X	Hardware Break-Fix Incident By Category - Last 12 Months Select Categories
Y	Historical Processes
Z	Hardware/Software/Asset Management SOP
AA	ISTS Governance Process Illustration
BB	Help Desk Call Statistics
CC	ISTS IT Governance Process Narrative

$\underline{SECTION\ J-LIST\ OF\ ATTACHMENTS}$

DD	ISTS Maintenance Agreements, Tools, Hardware
EE	ISTS Organization Chart- Updated through Mod #16
FF	ISTS Quality Assurance and Control Procedures
GG	Network Outages
НН	Logistics Hardware Management (LHM) Key Assets - Reorder Stock Level
II	List of Key GAO technologies
JJ	Network Topology Drawings
KK	Database Team Quarterly Report Template
LL	Publishing and Technical Support Index
MM	Rack Elevation
NN	Target Enterprise Capabilities View
OO	Target Enterprise Technologies and Capabilities View
PP	IM Workflow
QQ	Bid Protest Report Procedures
RR	Letter Report Procedures
SS	Testimony Procedures
TT	COR Appointment Letter (Provided as a separate attachment)
UU	Revised - Quality Assurance Surveillance Plan (QASP)- Updated through Mod #16
VV	Problem Notification Report
WW	Information Management SOP
XX	GAO Security Procedures- Updated through Mod #16
YY	Revised - Integrated Master Schedule Template
ZZ	REMOVED AT AWARD
AAA	REMOVED AT AWARD
BBB	Web Operations SOP
CCC	Publishing Technical Support SOP
DDD	Information Management Weekly Report – Template provided through Mod #16
EEE	Added - VTC Metric Report

TRAVEL AUTHORIZATION REQUEST

Industry Partner: Client:				Travel# Date: Project Name: Project ID/IA# Contract/Task Order:	
TO:	FEDSIM Contracting O	fficer Representative		Las CLIN# Value:	t Inv. Submitted \$0.00
	. Ebolin bolling o	meer representative		CUM AMT BILLED: BALANCE:	\$0.00
FROM:	Requestor:			ESTIMATE:	\$0.00 \$0.00
THROUGH:	Client POC			BALANCE:	\$0.00
SUBJECT:	Travel Authorization Re	quest #			
Client Point of	Contact:		IP Project N	lanager:	
Purpose/Justific of Request: The personnel was a second of the pe	rho will support the above ε	effort at this site is:	Please note that a sepa	arate travel request form should	be submitted for each individual traveler.
Travelers:	Name:	Company:		Subcontractor POC:	
				Name:	
				Address:	
				City:	
	***************************************			Phone:	
				E-Mail:	
				Subcontract Purchase Order	
Travel Itinerary	:				
Departure:	<u>Date</u>	<u>Destination</u>	Return:	<u>Date</u>	<u>Destination</u>
Leave			Leave		
Arrive			Arrive		
Leave			Leave		
Arrive			Arrive		
Leave			Leave		
Arrive			Arrive		

ITEM Travel (CLIN 0000): Airfare: @ Per Diem: @ Hotel: @ Other: car rental Other Direct Costs (CLIN 0000)		\$0.00
Airfare: @ Per Diem: @ Hotel: @ Other: car rental		44.00
Per Diem: @ Hotel: @ Other: car rental		
Hotel: @ Other: car rental		
Other: car rental		
Other Direct Costs (CLIN 0000)		\$0.00
Post Differential Pay		·
Danger Pay:		
War Risk Insurance		
Other		
Subtotal Amount:	-	\$0.00
Material Handling Cost:		
General & Administrative (G & A) Cost:		
Total ODC Cost (CLIN 0000):		
Total Travel Cost (CLIN 0000):		
Total Trip Cost NTE:		
13ta: 11.p 336t111.2.		\$0.00
		\$0.00
	esent the Government's best estimate. The amount of obli	
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Metric Name	Description/Objective	Performance Standard	Surveillance Method		
Customer Support Services					
Total ITSM incidents by Type	Monthly ITSM incidents broken down by Failures, How To and Requests for all groups	Influence decisions on support staff needed for volume of work	FrontRange ITSM toolset		
Customer Support Incidents by Type	Monthly ITSM incidents for Customer Support broken down by Failures, How To and Requests	Influence decisions on support staff needed for volume of work	FrontRange ITSM toolset		
Breakdown of Failure Incidents by Topic	Monthly Failure ITSM incidents for Customer Support broken down by Topic	Provides data for possible problem areas that need escalation	FrontRange ITSM toolset		
Breakdown of How To incidents by Topic	Monthly How To ITSM incidents for Customer Support broken down by Topic	Influences decisions for providing addition GAO support in the form of training, documentation and general guidance	FrontRange ITSM toolset		
Breakdown of Service Requests	Monthly Service Requests for Customer Support broken down by type of request	Influence decisions on support staff needed for volume of work	FrontRange ITSM toolset		
Number of Remote Assists performed	Total number and listing of all details of monthly remote assists preformed	Ensures compliance with standard procedures for when to use technology	FrontRange ITSM toolset and Novel Remote control report		
Audio Visual Requests	Number of monthly Audio Visual requests	Influence decisions on providing additional rooms equipped with permanent AV setups and educating customers	FrontRange ITSM toolset		
Call volume and First Call Resolution	Total number of calls per month and percent of calls resolved on first contact	80% or more calls resolved on first call resolution	ACD System and FrontRange ITSM toolset		

Customer Satisfaction Survey Results	Automatic customer surveys sent on resolve of all How To and Failure Incidents	Monthly total response 98% or greater satisfied with service	FrontRange ITSM toolset		
LOGISTICS AND HARDWARE MAINTENANCE					
Management of Inventory Levels	Maintenance of specified quantity for any given asset	Quantity on hand at end of the month	Tracking Spreadsheet		
Store and Track Data Holding Devices	100% accountability for all such assets	Assets unaccounted for and/or incorrectly entered in Asset Manager at any time.	Inventory Reports		
Ship and Track Warranty Assets	Shipment to vendor via GAO Mailroom within 2 business days of determination that outside repair needed and active tracking of status until return to stock.	Time between determination of need for outside repair and shipment to vendor.	Monthly Hardware and Logistics Report		
Compliance with SOP	100% compliance with the SOPs	Any deviation from SOPs, e.g., failure to promptly note any asset location change in Asset Manager.	Inventory Report		
Comprehensive use of DM	100% employment of DM with appropriate access rights, as agreed upon	Any failure to use DM resulting in confusion and/or wasted effort.			
Security Operations					
ISSG-1	Security Technology Monitoring Availability	99.9 % Availability	Using SolarWinds and current administrative access to security technology to document uptime for Security Equipment Availability		

ISSG-2	Security Event Monitoring Infrastructure Time to Restore	Critical Faults TTR < 2 hours	Using SolarWinds and current administrative access to security technology document using Netlog
ISSG-3	Notification of Critical Infrastructure Faults	100% notifications within one hour	Using email and Netlog
ISSG-4	Security Event Detection	90% detected within 30 minutes	Using ELOG to document the anomaly
ISSG-5	Security Event Analysis to determine risk of potential anomaly	90% Initiated within 30 minutes from detection	Using ELOG to document the initial analysis
ISSG-6	Quarantine of Suspect System if security incident is determined	95% completed within 60 minutes	Using ELOG, Documented coordinated actions taken to quarantine of validated compromise
ISSG-7	Security Event Analysis Status Reporting	95 % within 1 hour after determination of a security incident	Using email and ELOG, provide a status update to GAO ISSG Management
ISSG-8	Malware/Anti-Virus Definition Files Updates to endpoint devices from release of vendor provided definitions and updates	Zero infections after 24 hours of release	Using Symantec Endpoint Protection (SEP) Manager
ISSG-9	Security Anomaly Investigation Report as a final analysis documented in approved format	90% within 10 days	Using Word template for documentation of a validated security incident
ISSG-10	Plans Of Actions & Milestones Report of	Zero tracked weaknesses exceeding	Using ISSG Excel FISMA and

	security contractor assigned systems	documented completion date	POAM tracking tools for expiration dates of findings and authorizations
ISSG-11	FISMA System Authorization Report based upon system implementation or upgrade date	95% of Major and Minor systems complete by system implementation date	Using ISSG Excel FISMA, ORRB reports, and SCRs
ISSG-12	Initial Security Assessment based upon security contractor system assignments	90% of all identified systems complete within 30 days of identification	Using WIRM and SCR processes to identify new systems
ISSG-14	Information Security Risk Report based upon validation of approved configuration standards	Implementation compliance to security configuration equal to 85% of systems and endpoints	Using Tripwire to validate the approved configuration standards for technology
ISSG-15	Information Security Risk Report for Web Applications based upon OWASP Top 20	Implementation compliance to security configuration equal to 85% of Web applications	Using WebInspect to validate the approved configuration standards for technology
	Data Cei	nter Operations	
Production Servers Availability	Percentage time production servers are available	99.5% to 99.9% availability	A combination of SolarWinds Orion NPM: Fault and Performance Management, and Nagios reports
Restore Servers	Measure the time it takes to restore server and connect to the network	Within \leq 2 hours of a medium category event. Within \leq 30 minutes of a high category event	A combination of SolarWinds and FrontRange ITSM Ticket
SAN Availability	Percentage time SAN is available	99.5% to 99.9% availability	A combination of SolarWinds Orion NPM: Fault and Performance Management,

			and SAN Storage Manager
Critical Application Availability	Percentage time critical applications are available (critical applications are defined as Directory Services, and Messaging Services)	99.5% to 99.9% availability	A combination of SolarWinds Orion NPM: Fault and Performance Management, and Nagios reports
Application Incident Resolution	Measure the time to restore application (by Severity).	Within \leq 2 hours of a medium category event. Within \leq 30 minutes of a high category event	A combination of SolarWinds and FrontRange ITSM Ticket
Application Utilization & Performance	Measure application response time and average No of users;	Max response time for application ≤ 70ms	SolarWinds NPM and NetFlow Traffic Analyzer
Patch Release Timeliness for Critical Vulnerabilities	Percentage of patches applied between patch availability and deployment at GAO for critical vulnerability systems (as defined by FIPS Publication 199) within 15 calendar days	95% to 96% of patches applied	A combination of FrontRange ITSM Release Management MVM-3100 Vulnerability Report
Backup Timeliness	Percentage of backups that occur on time according to schedule	98% to 99% of backups occur on schedule	Symantec Backup Exec
Print Servers Availability	Measure the percentage of time the Print server infrastructure is available	99.9% availability	Periodic Inspection
Environmental & Power Monitoring	Measure contractor's response to alert on UPS, PDU and environmental factors within racks that can cause servers and devices to overheat or malfunction	99.9% availability	Solarwinds and APC InfraStruXure Data Center monitoring systems

Asset Management Percent of assets (hardware) accurately identified in tracking system		99.9% availability	Asset tracking system
	Netwo	rk Operations	
Network Availability during business hours	Percent of time network (LAN and WAN) is available during business hours	99-99.8%, and no single instance of network downtime greater than or equal to 4 hours	A combination of SolarWinds Orion NPM: Fault and Performance Management, and Nagios reports
		= 97 – 99.7%, and no single instance of network downtime greater than or equal to 4 hours	A combination of SolarWinds Orion NPM: Fault and Performance Management, and Nagios reports
Mean Time to Respond (MTTR) to Network Outages during business hours	Response to requestor after receipt of service desk ticket or auto generated notice	15 to 20 minutes	FrontRange ITSM toolset
Mean Time to Respond MTTR to Network Outages during non-business hours	Response to requestor after receipt of after hours service desk ticket or auto generated notice	30 to 60 minutes	FrontRange ITSM toolset
Mean Time to Repair (MTTR) the data network infrastructure such as Routers and Switches	Repair is depending on situation and hardware availability on site. Planned or unplanned and level of effort.	99.9% service availability 2-hour maximum repair time to resolve Priority 1 planned outages. 6-hour maximum repair time to resolve Priority 2 unplanned outages	NCM and command-line interface (CLI)
IP Address management (IPAM)	Manage Agency IP addresses	100%	SolarWinds IP Address Management
Bandwidth Utilization	Bandwidth capacity utilization percentage	75% to 80% capacity 95% of the time	Reports from SolarWinds Orion NPM; NetFlow Analyzer
Network Infrastructure	Measures the response time and	Average response time <5ms for	SolarWinds Orion NPM

utilization & performance	utilization percentages during peak business hours	Network Devices at HQ and <75ms for Field Offices	Summary
Capacity/Performance Trend Analysis and Reporting	Measure daily/week and monthly report. Utilization and trend analysis	Monthly analysis reports and interim reports	SolarWinds NPM and NetFlow Traffic Analyzer
Notification of Critical Infrastructure Faults	Time to notify critical infrastructure faults	100% notification within 1 hour	A combination of SolarWinds Orion NPM: Fault and Performance Management, Nagios and FrontRange reports
	Application M	laintenance Support	
Maintenance of System Documentation	Ensure all system documentation is updated upon completion and delivery of system upgrades/enhancements	System documentation updated and submitted for approval within 30 days of deployment of any upgrade/enhancement	Manual count of signed off documents relative to the list of required documents for each system
Effectiveness of system changes/upgrades	Measure the quality and effectiveness of any system changes, bug fixes, enhancements, and upgrades	System changes/upgrades/enhancements completed within required timeframes with no defects	ITSM, Change Requests tickets
Uptime	Delay, avoid or mitigate degradation of services supported by systems	100% uptime for all applications within normal business hours (6am-7pm EST/EDT, Monday-Friday)	Network monitoring tools, ITSM
Problem Resolution	Minimize time to identify and resolve system problems	Measure length of time between identification of a problem to resolution acceptance by customer	ITSM

Testing List Completeness	Ensure no applications are missed during testing in each scheduled maintenance cycle	100% of relevant applications are tested in each scheduled maintenance cycle	Applications Test List, Technical Monitors/Testers		
Applications Inventory Completeness	Ensure complete scope of applications (e.g. applications inventory, modules, plug-ins, allocation of s/w licenses, s/w versions) requiring maintenance and support are known to all stakeholders (ISTS and business)	Complete and accurate information about all items within scope exists and is readily available upon demand by GAO	Applications Profiler, periodic triggers (e.g. annual budget call, on-boarding of applications, applications retirement)		
Operational Business Intelligence (BI)	Provide end-to-end operational maintenance of the enterprise data	Data in BI platform is loaded and validated within requested timeframes	Discrepancy reports, BI Admin Module (BI Manager), ITSM		
Support	warehouse and business intelligence platform and associated applications	BI reports and applications function as expected			
Rapid Applications/Forms	Customer satisfaction (both ISTS and business owner) with solution developed via RAD	RAD solution developed/delivered within agreed upon schedule	Periodic reports and reviews (e.g. progress reports, budget reports, stand-ups), CSAT		
Automation Support (RAD)		RAD solution developed/delivered within agreed upon cost			
		RAD solution developed/delivered within agreed upon scope			
		RAD solution approved and accepted by ISTS and business customer			
	Enterprise Architecture				
Enterprise/Segment Architecture Support Develop and deliver quality EA products identified in EA Program Plan (e.g. enterprise transition plan, As-Is and Target architecture products) within requested timeframes	identified in EA Program Plan (e.g.	EA products delivered within requested timeframes	 EA Program Plan EA Repository (either DM or IT Roadmap Builder tool) 		
	EA products approved by Segment Leads				

Business Analytical Services Support	Provide timely business analytics support (e.g. identify business requirements, translate business requirements into technical requirements) and develop quality products (e.g. process models	Business analytics support and/or products delivered within requested timeframes	EA Program PlanEA Repository (either DM or IT Roadmap Builder tool)
		Business analytics support and/or products approved by Segment Leads	
Business Intelligence Services Support	Support planning and use of business intelligence and analytical reporting services	Business intelligence services support and/or products delivered within requested timeframes	 EA Program Plan EA Repository (e.g. business requirements,
		Business intelligence services support and/or products approved by Enterprise Data Manager	ETL requirements, dimensional models, relational models)
Enterprise Data Management Support	Support GAO's authoritative data source management and the development of data management strategies and techniques	Enterprise data management services support and/or products delivered within requested timeframes	 EA Program Plan EA Repository (e.g. data dictionaries & models, process models, information flow diagrams, activity models, CRUD matrices)
		Enterprise data management services support and/or products approved by Enterprise Data Manager	
	Application N	laintenance Support	
System Documentation	Document alignment to ensure that all configuration settings and baselines for standard builds and devices are up-to-date and in CM control	Audits of build scripts and configuration database to ensure current documentation	Manual checks between technical standard, scripts, and documentation
Change Requests after deployment	The number of change requests tickets following system deployment	Measure the quality and effectiveness of the release	HEAT
Defect Closure rate	Length of time between Defect	Measure the effectiveness of software	HEAT, Release Management

	identification and implementation	maintenance		
GAO Web Content and Product Metadata Management, Distribution and Publishing Services				
Distribution of restricted publications: secure distribution (Congressional Clients and internal key GAO staff)	a. Post restricted audit reports and related video and audio files, when applicable, to secure web pages b. Create email message with correct content and send to correct recipients	100 percent error free	Government monitoring	
Distribution of unrestricted and derestricted publications: prepublishing distribution (Congressional Clients)	 a. Post audit reports and related video and audio files, when applicable, to prepublishing (non-public) web pages b. Create email message with correct content and send to correct recipients 	100 percent error free	Government monitoring	
Distribution of unrestricted and de- restricted publications: pre- publishing (Congressional and other (non- Congressional) recipients, agency, media, and other interested parties)	a. Distribute 30 minutes timeframe after client distribution b. Create email message with correct content and send to correct recipients	100-percent error free in the defined 30 minute timeframe	Government monitoring	
Daily web posting of	a. Post audit reports and related video	100 percent of products received by	Government monitoring	

new audit and special products	and audio files, when applicable, to public web pages b. Timeliness and accuracy of new publications posted daily with no errors in associated metadata	noon that day for public release	
Testimony postings	a. Post testimony and related video and audio files, when applicable, to public web pages b. Timeliness and accuracy of testimony posting with no errors in associated metadata 100 percent: Post testimon notification by CR Staff to contact the contact and accuracy of testimony posting with no errors in associated metadata		Government monitoring
Create HTML of legal decision and opinions	Created and posted with PDF concurrently	100 percent of files received by 10am	Government monitoring
Daily web posting of new legal products	a. Post legal to public web pages b. Timeliness and accuracy of legal posting with no errors in associated metadata	100 percent of products received by 10 that day for public release	Government monitoring
Public email notifications	Timeliness and accuracy of daily email notification containing that day's issued publications	By 2pm the email is sent containing the designated audit products for the day By 4pm the email is sent containing the designated legal products for the day (Either may be later at direction of government due to volume of postings or special case publication)	Government monitoring.
Older/Historic	Older products that are identified for	100 percent posted with no errors in	Random checks by

publications posting	posting will also be fully cataloged and indexed within one working day of receipt.	associated metadata	government
Posting process error reporting	Report to the technical monitor on any errors in the posting process	100 percent reported as they occur	Government monitoring
Accessible Text file creation for products, except legal decisions and opinions	Created and posted within 3 days of original product posting	100 percent of files meet standard	Random review by government
Webmaster mail	monitoring/response	 a. Read at least 4 times a day (spread throughout the day) b. Forward high priority receipts as defined by the government to technical monitor as read c. Respond or forward other receipts to responsible GAO party per GAO-provided direction by one business day 	Government monitoring
GAO publishing support	User support for publishing software issues requested by GAO and contract staff, and referrals by Help Desk	 a. Monitor GraphicHelp email hourly and provide initial response immediately b.15 minutes initial response to requests for assistance by phone or walk-in c. Follow-up defined by nature of request 	Government monitoring
Preflight review	Technical review for products that will be	a. Review and respond with results	Government monitoring

requests	printed	within one hour for most products b. Special product review response defined by nature of request	
Template Monitoring the GAO publishing environment to identify impacts on templates Address requests for new templates or template revisions		Ongoing monitoring Forward requests or issues to technical monitor for consideration and decision	Government monitoring
US Org Updates	Maintain address records for Congress and Heads of Federal Agencies	Update as soon as changes become known, without prompting from GAO	Government monitoring
Distribution of restricted publications: secure distribution (Congressional Clients and internal key GAO staff)	a. Post restricted audit reports and related video and audio files, when applicable, to secure web pages b. Create email message with correct content and send to correct recipients	100 percent error free	Government monitoring
Distribution of unrestricted and derestricted publications: prepublishing distribution (Congressional Clients)	a. Post audit reports and related video and audio files, when applicable, to prepublishing (non-public) web pages b. Create email message with correct content and send to correct recipients	100 percent error free	Government monitoring
Distribution of unrestricted and derestricted	a. Distribute 30 minutes timeframe after client distribution	100-percent error free in the defined 30 minute timeframe	Government monitoring

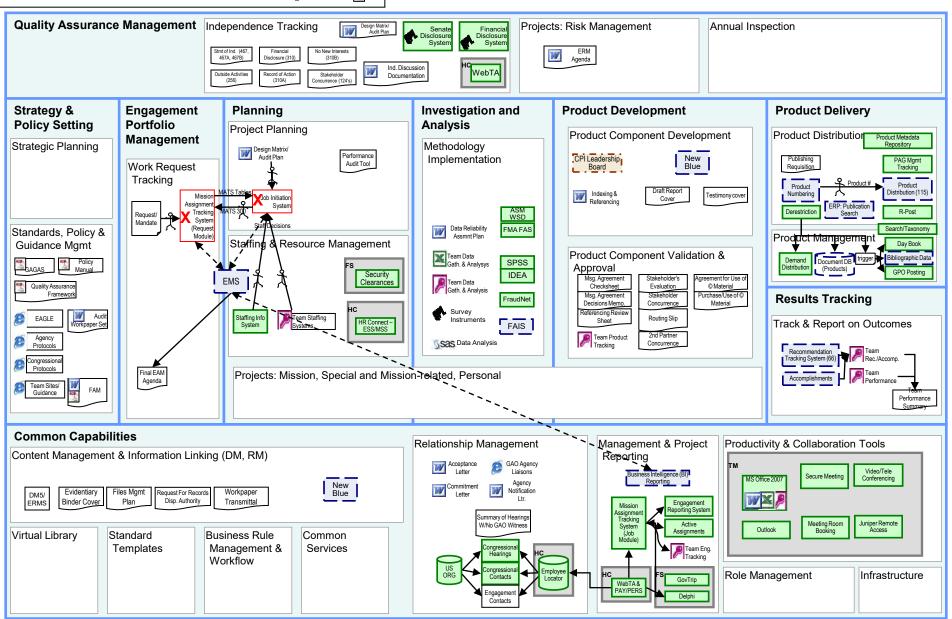
publications: pre- publishing (Congressional and other (non- Congressional) recipients, agency, media, and other interested parties)	b. Create email message with correct content and send to correct recipients		
Daily web posting of new audit and special products	 a. Post audit reports and related video and audio files, when applicable, to public web pages b. Timeliness and accuracy of new publications posted daily with no errors in associated metadata 	100 percent of products received by noon that day for public release	Government monitoring
Testimony postings a. Post testimony and related video and audio files, when applicable, to public web pages b. Timeliness and accuracy of testimony posting with no errors in associated metadata		100 percent: Post testimony upon email notification by CR Staff to do so	Government monitoring
Create HTML of legal decision and opinions	Created and posted with PDF concurrently	100 percent of files received by 10am	Government monitoring
Daily web posting of new legal products	a. Post legal to public web pages b. Timeliness and accuracy of legal posting with no errors in associated metadata	100 percent of products received by 10 that day for public release	Government monitoring

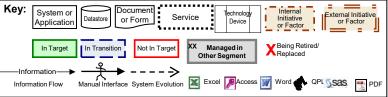
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Public email notifications	Timeliness and accuracy of daily email notification containing that day's issued publications	By 2pm the email is sent containing the designated audit products for the day By 4pm the email is sent containing the designated legal products for the day (Either may be later at direction of government due to volume of postings or special case publication)	Government monitoring.
Older/Historic publications posting	Older products that are identified for posting will also be fully cataloged and indexed within one working day of receipt.	100 percent posted with no errors in associated metadata	Random checks by government
Posting process error reporting	Report to the technical monitor on any errors in the posting process	100 percent reported as they occur	Government monitoring
Accessible Text file creation for products, except legal decisions and opinions	Created and posted within 3 days of original product posting	100 percent of files meet standard	Random review by government
Webmaster mail	monitoring/response	 a. Read at least 4 times a day (spread throughout the day) b. Forward high priority receipts as defined by the government to technical monitor as read c. Respond or forward other receipts to responsible GAO party per GAO-provided direction by one business day 	Government monitoring

GAO publishing support	User support for publishing software issues requested by GAO and contract staff, and referrals by Help Desk	 a. Monitor GraphicHelp email hourly and provide initial response immediately b.15 minutes initial response to requests for assistance by phone or walk-in c. Follow-up defined by nature of request 	Government monitoring
Preflight review requests	Technical review for products that will be printed	a. Review and respond with results within one hour for most products b. Special product review response defined by nature of request	Government monitoring
Template maintenance	Monitoring the GAO publishing environment to identify impacts on templates Address requests for new templates or template revisions	Ongoing monitoring Forward requests or issues to technical monitor for consideration and decision	Government monitoring
US Org Updates	Maintain address records for Congress and Heads of Federal Agencies	Update as soon as changes become known, without prompting from GAO	Government monitoring

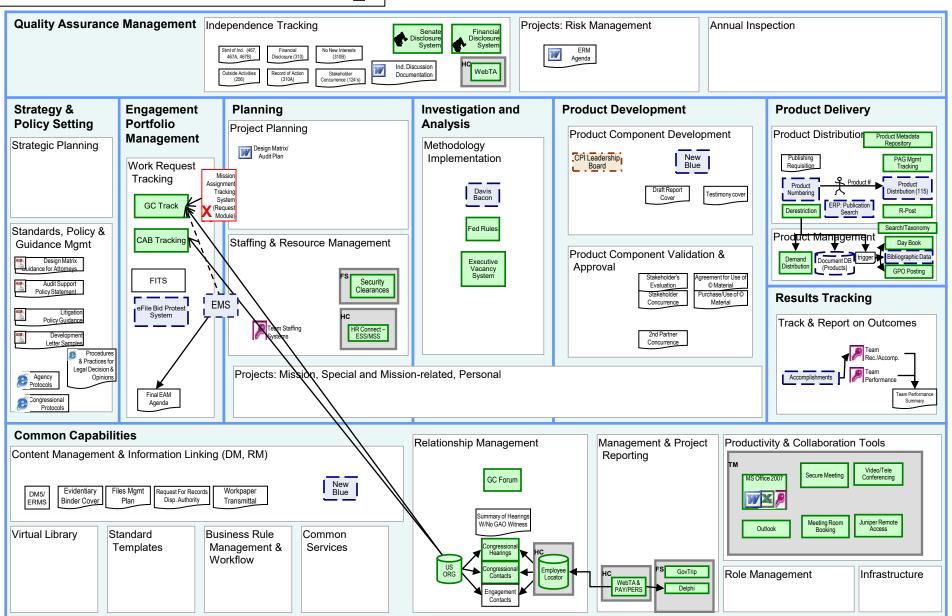


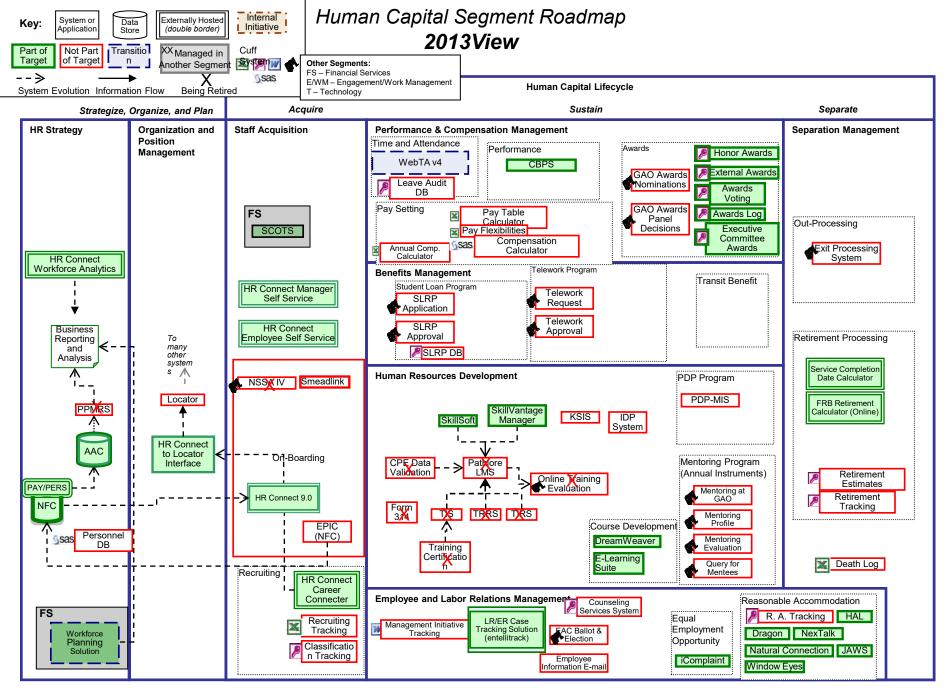
Engagement/Work Management Segment Roadmap FY 2013 – Analyst View



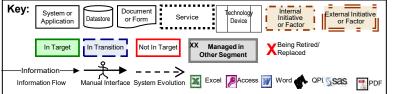


Engagement/Work Management Segment Roadmap FY 2013 – Legal Decisions and Opinions View

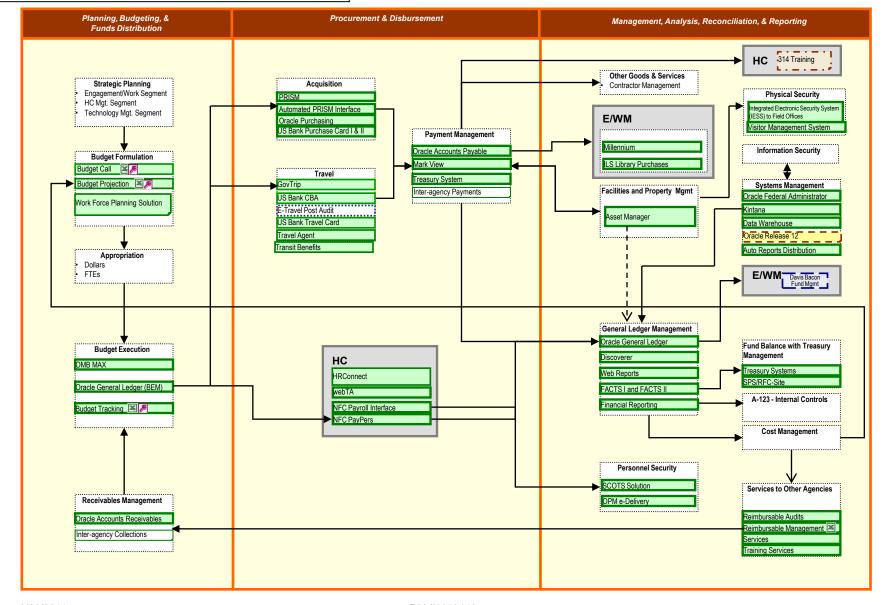




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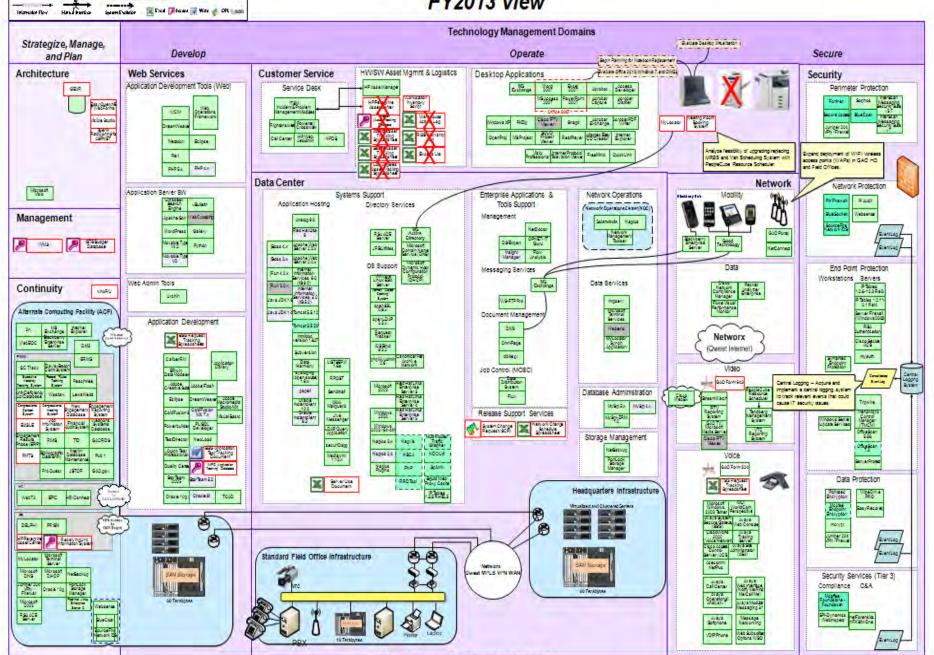
Financial Services Segment Roadmap FY 2013 View



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Technology Management Segment Roadmap FY2013 View



Updated as of December 9, 2011

A Guide to ISTS Change Advisory Board (CAB) Meetings

This document establishes guidelines for how the ISTS Change Advisory Board (CAB) and CAB meetings will be conducted. The objective of the ISTS CAB is to provide a repeatable process for the approval of all network changes, ensuring that stakeholders are fully aware of changes and their impact to systems, customers, and operations.

CAB meetings

- The CAB meetings will be used to provide a formal review and authorization of changes, a review of outstanding changes, and to discuss any impending major changes.
- All System Change Requests (SCR) will be electronically sent in advance to CAB members to allow time for impact and other assessments, or necessary collaboration / technical discussion, prior to the CAB meeting.
- The CAB membership represents all ISTS groups. Electronically or in person, each stakeholder should provide input (electronically prior to / or vocally during the CAB meeting) into the approval of changes where they possess knowledge of, are impacted by, or have responsibility for the proposed change.
- Non-attendance at the CAB or not providing input prior to the CAB will be deemed concurrence to approve the proposed change.
- If, complex, high risk, or major impact changes are submitted, a formal technical review meeting may be required prior to review at the CAB meeting.
- The ORG Director and /Change Manager or Designee will always act as the Chair of all CAB meetings.
- CAB meetings are open to all ISTS and contractor staff, and will be held weekly on Mondays and Thursdays from 9:00-10:00 in room 1Q66.

CAB agenda

- Review and decision on all pending SCR's by CAB members.
- Review of the CAB and change management process especially during the initial weeks of implementation - to include Q & A's, need for further clarification and/or documentation, suggested changes, etc... that will facilitate the collaborative review and approval process.

Potential CAB member considerations for each proposed change

- What devices / technical services are impacted by this change?
- What customer services are impacted by this change?
- What documentation is required to accompany this change?
- Has this change been successfully tested or passed QA testing?
- What affect will this change have upon the infrastructure, customer service, capacity, performance, reliability, security, other applications?
- Will this change impact other services / technology that reside on the same device?

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- Will resources in my area be required to assist in the implementation or support of this change?
- What is the effect/risk/impact of not implementing this change?
- Are there impacts to budget / contract management / acquisition / licensing / maintenance agreements due to this change?
- Are third party vendors/providers involved in the implementation of this change?

CAB recommendations/decisions

All CAB recommendations and decision will be documented and shared with all CAB members.

CAB disposition of SCRs

The disposition of all proposed changes will be done by consensus of the CAB members. Approved changes will be forwarded onto the network deployment and maintenance manager for scheduling. Changes that require additional action or are not approved will be returned to the SCR requestor indicating the action required or reason for non-approval. If the CAB rejects a change, the reasons for the rejection will be documented in full.

If the CAB cannot make a final decision on a proposed change, then that change request will be escalated by the Change Manager to the CIO for disposition. The results of the escalation will be documented and sent to the CAB and the SCR requestor.

Once a decision has been made, the Change Manager will modify the status of the SCR to Authorized / Pending / Rejected in the SCR system.

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ISTS System Change Request (SCR) Process

Step	Role	Description	Output
1	Requestor, CM	Submit System Change Request (SCR)	Submitted SCR
	Coordinator	 Requestor fills out a SCR to request a change and submits it via the SCR application. 	
		 Change Coordinator is notified and logs the request. 	
2	CM Team (Manager, Coordinator)	Perform Initial Analysis of System Change Request	SCR routed to CAB or returned to requestor
		 Determine type of change (Normal, Standard, Emergency) 	
		 Determine sufficiency of data submitted on the SCR form. 	
		 Update the SCR status in the SCR application OR notify the SCR requestor that additional information is required before it can be brought to the CAB. 	
3	CM Team	Distribute the SCR for review	CAB Agenda,
		 Send the SCR electronically to CAB members for review in advance of the next meeting 	Forwarded SCR(s)
		 Add it to the next CAB meeting agenda 	
4	CAB Members	Assess and Determine Status of System Change Request(s)	Decision for each SCR
		The CAB reviews each SCR and provides comments or questions:	
		 Electronically prior to the CAB meeting (requestor and CM Team) or 	
		 Raises questions or comments at the CAB meeting 	
		Pending the resolution of raised issues or questions, the CAB members determine their decision on each SCR:	
		o Approve – (go to step 5	
		○ Not Approve – (go to Step 9)	
		 Pending – more information is needed before a decision can be made – (go to step 2) 	
		If no consensus can be reached for any	

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Step	Role	Description	Output
		SCR, it will be escalated to the CIO for a decision.	
5	CM Coordinator	Update SCR(s) in the SCR application and distribute CAB results	CAB results / status table
		 Update the SCR system with CAB decision, 	SCR(s) with decision
		 Forward all approved SCRs to SCR requestor, CAB members, and the NOG network deployment and maintenance manager. 	
6	NOG network deployment and maintenance manager	Coordinate and schedule the approved change deployment timing, resources, sequence, and notification as required.	Updated Network Deployment and Maintenance Schedule
7	SCR Requestor / Implementer	After SCR is added to deployment schedule, implement the change as approved and scheduled.	Netlog Entry
		 If successful, complete a netlog and update the SCR status to "completed". 	
		 If unsuccessful, back out the change, assess changes needed, re-test as necessary, and re-submit the SCR for CAB review with reason indicating why it did not meet expected results. (go to Step 1) 	
8	NOG network deployment and maintenance manager	Update the Network Deployment and Maintenance Schedule to reflect completed changes.	Updated Network Deployment and Maintenance Schedule
9	CM Coordinator	Validate Implementation and Close Change Request	Verification Results, Updated SCR
		 Include the closed SCR in next CAB agenda for awareness 	Summary Log and Closed SCR
		 Update the SCR in the SCR system to "closed". 	

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System Change Request (SCR) System

Open the SCR system by following this link: https://survey.gao.gov/scr/

System Change Requests / Change Management Definitions

- Normal Change A change to existing products and services in the production environment that can be scheduled. Normal changes are the result of new IT initiatives; changes in form, fit, function or security of operational systems; or other operations and maintenance changes. Routine and periodic changes that have been initially approved Examples:
 - Pre-approved security patches, antivirus updates, or maintenance (e.g. DM, Telecom)
 - Pre-approved server reboots (e.g. BES, Citrix, Blades)
 - New or Major Version Software deployments (or other major configuration changes)
 - Asset Manager
 - Intel Wireless Client
 - Yammer
 - o FAS 1.1.1 (CF9 and Open Office)
 - "Right of the Decimal" software updates
 - Minor code updates to existing systems (PMR, WFP, EMS, ...)
 - Updates to existing system tools/management software (SolarWinds,)
 - Application object deployments
 - Statistical applications to limited users
 - Normal.dotm
 - Acrobat updates
 - TNSnames.ora (sort of Standard)
 - Group policy changes
 - Pre-authorization for Beyond Trust and RDirectory; all others must go through ISSG
 - Telecom or network communication changes
 - Handled and coordinated by NOC, Tier 2 mgmt, Tier 2/3 meeting with TSG and ISSG
 - Commissioning of hardware
 - Boston and SF Citrix server swap
 - Move/Add/Change of hardware
 - Decommissioning of hardware

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- Power Outages
 - o CenturyLink Maintenance
 - o Building Maintenance
- **Emergency Change** A change to existing products and services in the production environment that require immediate action (or need to be completed by a quick deadline) to restore service or prevent service disruption.

Examples:

- Server reboots to clear memory issues
- Break fixes to existing systems



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EAAG Applications/Systems by Owner - FY 2013

11	Tankai ad Berute	Commercial	Application (Contains N	Application Description	CAO Carraga	Acces Town	Duttel Torre	Codeliere	FICAS	Detalian	COM A - Att of Att	105 (4
1	Technical Monitor Ballard, Edward		Application/System Name CPE Data Validation System (CDVS)	Application Description Enables the learning systems administrator to create necessary reports to flag, and if necessary, delete duplicate CPE records on staff's training	GAO Segment HCM	Access Type Desktop	Build Type Custom	MS Access	FISM	Oracle/MS Access		a, b, d, e: 10 times - Extra Low g, h, i, k: 30 times - Extra Low o, p: 2 times - Extra Low
2	Ballard, Edward	Rishi, Ruby	Training Resource Registration System (TRRS)	transcripts. TRRS- Web-based front end module of Pathlore Allows GAO staff to browse course catalog and register online for internal training courses offered by GAO - including classroom, we-based, and self-paced offerings Includes links to resurce	НСМ	Web	COTS			Oracle		a, b, d, e: 5 times - Extra Low g, h, i, k: 30 times - Extra Low o, p: 5 times - Extra Low
- 2		0:1:01		guide for competency development which suggest approapriate training for each of the 12 competencies Technical attributes: IIS, Webbased, LDAPThe frameset & help files are on alecto (webapps/trrs)	WGM.		COAS					
	ŕ		Pathlore Learning Management System	Pathlore is a Learning Management System software product that provides a complete, integrated family of applications that automate the processes associated with learning management administration and training content development and delivery.		Web	COTS		Yes	Oracle		a, b, d, e: 5 times - Extra Low g, h, i, k: 30 times - Extra Low o, p: 5 times - Extra Low
	,		My Locator	This is an internal web-based application providing staff and contractors with the ability to provide personal contact information for purposes of official business and emergencies	НСМ	Web	Custom	Java	Yes	Oracle		g, h, i, k: Daily - Low o, p: 5 times - Low
5	Ballard, Edward	Rishi, Ruby	Bargaining Unit Application	Biweekly report produced by EOSC staff and sent to HCO. Monthly, HCO is required to send the Union an updated report with bargaining unit employee information. This report is sourced from My Locator and is used to provide the union updates on bargaining unit employees including employee contact information.		Web	Custom			MS Access		a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low

6		Dunn, Marianna		This Access database serves two purposes: - This database was originally created to verify the home address on file at NFC for GAO employees. This database imports the home address on file at NFC by way of My Locator. This database also allows FMBO to import the Metro Pickup Records, which shows how much in benefits staff have downloaded to their SmarTrip cards. These Pickup Records ensure that staff has not received more benefits than they're allowed. - On a Quarterly basis, EOSC generates an NFC FOCUS Extract that looks at T&A data on file at NFC and reports out data for employees who are on leave without pay (LWOP) for two or more consecutive pay periods and employees on annual leave and sick leave for two or more consecutive pay periods.		Web	COTS		MS Access	a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
7	Ballard, Edward	Rishi, Ruby	(TIS)	A web-based application that allows staff to self-certify training and view their training transcript, including CPE/CLE credits, and progress toward CPE/CLE requirements. TIS also contains various management reports and system administrator functions to maintain the application. - Provides unit managers and HCMs with up-to-date training data for all staff members, as well as training budget data. - Planned Cold Fusion version of TIRS to replace current Access-based version (and include self-certification functionality?).		Web	Custom	ColdFusion	Oracle	 a, b, d, e: 30 times - Low g, h, i, k: 30 times - Low o, p: 5 times - Low
		Rishi, Ruby		network operations staff to register new Locator accounts, re-link obsolete accounts and to synchronize My Locator and network accounts. In addition, the Locator -Admin allows EOSC staff to upload the NFC data file so that NFC data can synchronize with the employee's Locator account.		Web	Custom	Java		g, h, i, k: Daily - Low o, p: 5 times - Low
9	Ballard, Edward	Rishi, Ruby	Pathlore Data Import	This Microsoft Access database facilitates the import of employee personnel data into Pathlore. The source for data is this Access database is My Locator.	НСМ		Custom	MS Access	Oracle/MS Access	 a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
10	McGregor, Eeron	Rishi, Ruby	Competency-Based Performance System (CBPS)	The intranet-based system enables the capture and secure sharing of performance appraisal information for GAO staff that is ultimately used to determine an individual's compensation.	НСМ	Web	Custom	ColdFusion Yes	Oracle	 a, b, d, e: 50 times - Low g, h, i, k: Daily - High o, p: 5 times - Low
11	McGregor, Eeron	Dunn, Marianna	Security Clearance Online Tracking System (SCOTS)	Tracks all investigations and clearances on GAO employees.	FS	Desktop	Custom	Access	Oracle	 a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low

12	McGregor, Eeron	Rishi, Ruby	Smeadlink Paper Recordkeeping	Smeadlink Paper Recordkeeping tool provides accountability and control over Official Personnel Folders (OPF). Â Smeadlink enables users to know exactly where OPF files are at all times. Â Folders are barcoded and scanned when removed from and returned to the OPF file room. Â It also generates reports on OPFs charged out. Â The solution includes a barcoder and desktop software.		Desktop	COTS			Access/SQL Server	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
13	Shrestha, Gaurab	Marianna Dunn	Workforce Planning System (WFP)	Java-based system integrated with with Pentaho BI server to support GAO's Workforce Planning	FS	Web	Custom	Java	Yes	MySQL	a, b, c, d, e, g, h, i, k, l, o, p	a, b, d, e: 50 times - Low g, h, i, k: Daily - High o, p: 5 times - Low
14	•	Marianna Dunn	GovTrip	Government electronic system hosted by Northrup Grumman at DOT/ESC soon to be replaced	FS	Web	GOTS		Yes	??	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
15	Shrestha, Gaurab		Business Intelligence (Pentaho) and Enterprise Data Warehouse	GAO's Business Intelligence and Enterprise Data Warehouse	FS	Web	COTS	Java		Oracle/MyS QL	a, b, c, d, e, f, g, h, i, k, l, o, p	a, b, d, e: 50 times - Extra High g, h, i, k: Daily - Extra High o, p: 20 times - Low
16	•	Marianna Dunn	US Bank Delphi Purchase Card Interface	Interface US bank purchase card transactions from US Bank Purchase Card System to Delphi A/P module	FS	Mainframe	GOTS			??	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
17	Shrestha, Gaurab	Marianna Dunn	US Bank Travel Card System	Travel Card holder web site and electronic payments processing	FS	Mainframe	GOTS		Yes	??	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
18	Shrestha, Gaurab	Marianna Dunn	US Bank Purchase Card System	Web based system for managing, approving and paying GAO purchase card transactions	FS	Mainframe	GOTS			??	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
19	Shrestha, Gaurab	Marianna Dunn	Discoverer Delphi Web Reports	Generates financial statements, GAO custom defined reports, and ad hoc reporting from Delphi Data Warehouse.	FS	Web	сотѕ	Oracle Fins		Oracle	a, b, c, d, e, g, h, i, k, l, o, p	a, b, d, e: 10 times - Low g, h, i, k: 30 times - Low o, p: 2 times - Extra Low
20	Ballard, Edward	Ruby Jones	Employee Change Control System	MS Access application maintained and operated by MOSC, which utilizes an employee data change audit feature within Staff Locator to identify changes in key personnel information needed for update of employee data in GAO Delphi thru the Kintana data change	НСМ	Desktop	Custom	MS Access		Oracle/MS Access		a, b, d, e: 5 times - Extra Low g, h, i, k: 5 times - Extra Low o, p: 2 times - Extra Low
21	•	Marianna Dunn	Financial Management System (FMS)	AMS Federal Financial System (FFS). Supports all Financial Services LOB sub-functions.	FS		сотѕ			Oracle	a, b, c, d, e, g, h, i, k, l, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 2 times - Extra Low o, p: 2 times - Extra Low
22	Shrestha, Gaurab	Rishi, Ruby	Counseling Services System (CSS)	TBD	НСМ	Desktop	Custom			Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 5 times - Extra Low g, h, i, k: 10 times - Extra Low o, p: 2 times - Extra Low
23	Johnson, Rebecca	Dunn, Marianna	HP Asset Manager	Used by the Property Management staff to inventory and track GAO property.	FS	Client-Server	COTS	COTS	Yes	Oracle	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 10 times - Extra Low g, h, i, k: Daily - Low o, p: 2 times - Extra Low

24	Shrestha, Gaurab	Dunn, Marianna	Travel Post Audit Application	TBD	FS	Web	COTS			??	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 22 times - Extra Low o, p: 2 times - Extra Low
25	Shrestha, Gaurab	Rishi, Ruby	National Finance Center	Configuration file setting IP addresses for mainframe access TN3270	FS	Mainframe	GOTS			Mainframe	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 20 times - Low o, p: 2 times - Extra Low
26	Shrestha, Gaurab	Rishi, Ruby	EPIC	NFC provided transactions processing interface into PPS.	FS		GOTS			??	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 10 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
27	Shrestha, Gaurab	Marianna Dunn	Management System	Oracle Federal Financials Vers 11.5.10 ERP sotware including G/L, A/R, A/P, Purchasing, Budget Execution, Federal Administrator (Systems Config component)	FS	Web	COTS	Oracle Fins	Yes	Oracle	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 20 times - Low o, p: 2 times - Extra Low
28	Shrestha, Gaurab	Jones, Ruby	Management Reporting System (PPRMS)	GAO built reporting application installed on GAO's network. This reporting tool uses data from Payroll Personnel System to provide sensitive human capital reports.	нсм	Web	Custom	SAS		Mainframe	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 20 times - Low o, p: 2 times - Extra Low
29	Shrestha, Gaurab	Rishi, Ruby	Payroll Personnel System	NFC mainframe system used to process GAO payroll and personnel actions.	нсм	Mainframe	GOTS		Yes	??	a, b, c, d, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 20 times - Low o, p: 2 times - Extra Low
30	Shrestha, Gaurab	Rishi, Ruby	Retirement Calculator Application	FRB Retirement Calculator SW (ESI)	НСМ	Web	Custom			MS Access	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 20 times - Low o, p: 2 times - Extra Low
31	Mcgregor, Eeron	Rishi, Ruby	(IDP) System	Individual Development Plan (IDP)is an automated of the CBPS application. Â The development plans created in this module are linked in a one-to-one ratio with the appraisals in CBPS reusing the current CBPS user role architecture. Â The module captures, reviews, communicates and updates the employees development plan. Â The information input into the development plans is reported out of the system via an IDP reporting capability that is accessed by users assigned the IDP Reporting Role. Â The IDP Reporting Role uses Organizational level security for viewing IDP information by Managing Directors and the Human Capital Office.	НСМ		COTS				a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 50 times - Low g, h, i, k: Daily - High o, p: 5 times - Low
32	Johnson, Rebecca	Marianna Dunn	(BCA)	The BCA will collect IT budget request data from GAO headquarters and field units; present the budget request data in a variety of reports; and export selected fields into a separate, stand-alone Microsoft Access database.		Web	Custom	Java		Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 2 times - Extra Low o, p: 2 times - Extra Low
33	Johnson, Rebecca	Rishi, Ruby	WebTa Daily Active Job Code Update	Imports new job codes and deactivates outdated codes in the webTA accounts table.	нсм	Web	Custom	Oracle PL/SQL		Oracle		a, b, d, e: 5 times - Extra Low g, h, i, k: Daily - Extra Low o, p: 2 times - Extra Low

34	Johnson, Rebecca	Ruby Jones	Web Time and Attendance (WebTA)	webTA is a web-based time and attendance (T&A) collection, approval, processing, and reporting application used by GAO employees. webTA's primary function is to capture the work and leave hours for each GAO employee to determine their bi-weekly pay and to track their leave accruals and leave and other time (e.g. LWOP, Holiday, Court Leave, Family and Medical Leave Act) charges over the course of their federal employment.		Web	COTS	Java	Yes	Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Low g, h, i, k: Daily - Low o, p: 2 times - Extra Low
35	Johnson, Rebecca	Marianna Dunn	Budget Tracking System (BTS)	The Budget Tracking System is an application built for Knowledge Service's Budget and Operations group. It captures and tracks the real-time status of budget accounts for GAO procurement of products and services from various vendors. It also includes a budget management component where an initial fiscal year budget is set up and purchases made throughout the year are debited against the fiscal year budget.	FS	Web	Custom	ColdFusion		Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 2 times - Extra Low o, p: 2 times - Extra Low
36	Shrestha, Gaurab	Rishi, Ruby	NFC Payroll Interface	Interface payroll data from NFC Payroll / Perssonnel Systems to Delphi G/L	нсм	Client Server	сотѕ		Yes		a, b, c, d, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 2 times - Extra Low o, p: 2 times - Extra Low
37	Ballard, Edward	Rishi, Ruby	Entellitrak	Web-based COTS data tracking application that enables meaningful data management, tracking, retrieval, and reporting for cases— including grievance, performance and conduct—that are managed by HCO's Workforce Relations Center. The system also helps Workforce Relations track bargaining units and bargaining agreements with the union.	НСМ	Web	COTS			SQL Server	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 5 times - Extra Low g, h, i, k: 40 times - Extra Low o, p: 2 times - Extra Low
38	Ballard, Edward	Jones, Donna	Distribution Workflow (DW)	This application has 2 pieces. The first is used to print labels either for a list of users received through the Form115 application or for a list of individuals from the mailing list. The second piece is for HCO to create labels for personnel. Replaces ATF File Generation Program and Form 50 Labels.	EWM	Java	Oracle				a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
39	Ballard, Edward	Jones, Donna	Demand Dissemination Report (DDR/distrpt)	The purpose of this application is to provide the statistics on the dissemination of products listed as Demand Distribution.	EWM	Java	Oracle				a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
40	Ballard, Edward	Jones, Donna	Product Planned Distribution System (Form 115)	Form115 is an internal web application that is used by GAO personnel to distribute GAO reports to congressional committees, internal GAO recipients and others. It enables the distribution department to enter, view, and print report distribution information. When product are Exported, they are distributed via DW.	EWM	PHP	Oracle				a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 5 times - Extra Low g, h, i, k: 20 times - Extra Low o, p: 2 times - Extra Low
41	McGregor, Eeron	Jones, Donna	Audit Decision Support System (ADSS)	Legacy application that tracked Procurement Law cases (bid protests) for OGC. Â Currently used for viewing historical records (<2005). Â Current functionality resides in GCTrack.	EWM	Client Server	Custom	PowerBuilder		Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 1 time - Extra Low g, h, i, k: Daily - Extra Low o, p: 1 time - Extra Low

42	McGregor, Eeron	Donna Jones	Executive Vacancy System- Web (EVS)	The Executive Vacancies application is a public application for searching a database of position vacancies reported to GAO by federal	EWM	Web	Custom	Java	Yes	Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Low g, h, i, k: Daily - Low o, p: 2 times - Extra Low
43	McGregor, Eeron	Jones, Donna	Davis-Bacon Claim System (DBCS)	departments and agencies. The Davis-Bacon Act (40 U.S.C. 3141-3148) protects certain categories of employees from being underpaid while employed by companies working on federal government contracts. The act requires that each contract for the construction, alteration, or repair of public buildings or works in excess of \$2,000, to which the United States is a party, state the minimum wages to be paid to various classes of laborers and mechanics. The system allows staff to process and track claims.	EWM	Client Server	Custom	PowerBuilder	Yes	Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 10 times - Low g, h, i, k: Daily - Low o, p: 2 times - Extra Low
44	McGregor, Eeron	Jones, Donna	File Information Tracking System (FITS)	OGC file tracking system	EWM	Client Server	Custom	PowerBuilder		Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 1 time - Extra Low g, h, i, k: Daily - Extra Low o, p: 1 time - Extra Low
45	McGregor, Eeron	Jones, Donna	Executive Vacancy System- Client (EVS CS)	The Executive Vacancies application is a public application for searching a database of position vacancies reported to GAO by federal departments and agencies.	EWM	Client Server	Custom	PowerBuilder	Yes	Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 1 time - Extra Low g, h, i, k: Daily - Extra Low o, p: 1 time - Extra Low
46	McGregor, Eeron	Jones, Donna	General Counsel Tracking System (GCTrack)	A system used for tracking legal research and legal cases as they relate to GAO audits and bid protests.	EWM	Web	Custom	Java	Yes	Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 10 times - Low g, h, i, k: Daily - High o, p: 2 times - Low
47	McGregor, Eeron	Jones, Donna	Federal Rules Tracking System (FedRules)	The Federal Rules application is a public application for searching a database of major and non-major rules products.	EWM	Web	Custom	Java		Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Low g, h, i, k: Daily - Low o, p: 2 times - Extra Low
48	Baluch, Faiza	Jones, Donna	Job Initiation System / Job Information System (JIS)	An engagement management application that captures basic information about an engagement, heavily focused on the Acceptance, Initiation and Commitment phases of an engagement	EWM	Desktop	Custom	PowerBuilder	Yes	Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
49	Baluch, Faiza	Jones, Donna	Flux	Flux is a modular Java-based batch processing tool incorporating job scheduling, workflow, and file transfer. Â Flux may be embedded as a set of APIs for Java, J2EE, XML, and Web Services applications.	TM		СОТЅ			??	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
50	Baluch, Faiza	Jones, Ruby	Work Management System (WMS)	MS Access-based application used to manage and track projects within the ISTS work portfolio.	EWM	Desktop	Custom	MS Access		Oracle/MS Access	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
51	Baluch, Faiza	Jones, Donna	GOAL4 - Key Effort Tracking System (G4DB)	This is a Microsoft Application developed to track projects that are aligned with Goal 4 Key Efforts	EWM	Desktop	Custom			Oracle/MS Access	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
52	Baluch, Faiza	Jones, Donna	Nightly Process	The MAIS Import, Job Code Replication, JIS Import, JIS Export interface with JIS; PMIS with PMIS; and KSIS with KSIS	EWM	Desktop	Custom	Delphi		Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
53	Baluch, Faiza	Jones, Donna	Engagement Reporting System (ERS) - Interface Update		EWM	Web	Custom			MySQL	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low

54	Baluch, Faiza	Jones, Donna	Staffing Information System (SIS)	The Staffing Information System (SIS) is a GAO intranet-based application that helps facilitate the staffing process for engagements and small projects within a team.	EWM	Web	Custom	ColdFusion		Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
55	Baluch, Faiza	Jones, Donna	Engagement Reporting System (ERS)	A reporting system that displays engagement information collected from a variety of system sources and organized by engagement management, product and oversight activities.	EWM	Web	Custom	Java		Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
56	Baluch, Faiza	Jones, Donna	Mission Assignment Tracking System (MATS) - EOSC Data Entry/Interface Update		EWM				Yes	Oracle	a, b, c, d, e, g, j, k, o	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e: 1 times/yr X Extra Low g: Weekly X Extra Low
57	Baluch, Faiza	Jones, Donna	Engagement Reporting System XML (ERSX)		EWM	Web	Custom	Java		Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
59	Baluch, Faiza	Jones, Donna	USOrg Leadership Difference	Used to compare Leadership data loads from iteration to iteration. Request to change the application to compare from extract to production to eliminate missed orphan data.	EWM	Web	Custom	Java		Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
60	Trevino, Juan	Jones, Donna	Congressional Contact System (CCS)	Documentation of a congressional contact memo for GAO audit teams, Congressional Relations and others, recording the participants, location, time, subject and details relevant to GAO activities.		Web	Custom	Java	Yes	Oracle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
61	Trevino, Juan	Jones, Donna	Derestriction Applications (derestrict, OCR De- Restriction)	Used by the Office of Congressional Relations to indicate which restricted documents have been released for public distributions. The information is used to update Doc_db, and the Demand Distribution databases.	EWM	Web	Custom	PHP		Oracle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
62	Trevino, Juan	Jones, Donna	PMTS Customer Search	PAG Management Tracking System Search. To locate the history of a requisition, enter your search criteria below. You do not need to use every field. When you use more search fields, your search is narrower (more specific) with fewer search results.	EWM	Web	Custom	Java		Oracle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
63	Trevino, Juan	Jones, Donna	Accomplishment Reporting System (ARS)	Used to collect, update, and retrieve information about accomplishments based on GAO audit products and other GAO work; similar to the form66 program, Export report.	EWM	Web	Custom	PHP		Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
64	Trevino, Juan	Jones, Donna	Engagement Results Phase (ERP)	The purpose of Engagement Results Phase (ERP) is to provide a single-sign-on and unified interface for applications pertinent to the results phase of the engagement process. Applications included in ERP now are: GAO Publication Database (PubDB), Planned Product Distribution (Form115), PMTS Customer Search, Recommendation Followup Application (Form66) and Accomplishment Report System (ARS).		Web	Custom	Java	Yes	Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low

65	Trevino, Juan	Jones, Donna	Lookup Table Maintenance (LTM)	Lookup table maintenance is used to update information in the Namesval (names of federal officials), Orgval (organizational information), and Stratgoalval (strategic goal/objective information) tables within the Doc_db, and Form66 databases.		Interface	Custom	Java	Ora	acle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
66	Trevino, Juan	Jones, Donna	Machine Aided Indexing (MAI) - Desktop	Machine Aided Indexing - this interface is part of BDE.Performs indexing of subject terms for GAO Reports.The MAI/TM application is located on the LAN at:X:\Local\Lockheed\SWD\moebius\kelly\mai\ga oclient\startui.bat. This COTS application feeds information to BDE.		Desktop	сотѕ		File	e System	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
67	Baluch, Faiza	Jones, Donna	United States Organization Table (USOrg-3.0)		EWM	Web	Custom	Java	Ora	acle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
68	Baluch, Faiza	Jones, Donna	Engagement Management System (EMS)		EWM	Web	Custom	Java	Yes Ora	acle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
69	Trevino, Juan	Jones, Donna	Online Legislative History Collection (leghist)	Legislative history files were scanned to pdf. Several small applications let the user browse the legislative history file and do a full text search, and allows users to split and merge files.	EWM	Web	Custom		Му	ySQL	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
70	Baluch, Faiza	Jones, Donna	United States Organization Table (USOrg-1.0)		EWM	Interface	Custom	Java	Ora	acle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
71	Baluch, Faiza	Jones, Donna	United States Organization Table (USOrg-2.0)		EWM	Interface	Custom	Java	Ora	acle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
72	Baluch, Faiza	Jones, Donna	Usorg-webstart		EWM	Web	Custom	Java	Ora	acle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
73	Trevino, Juan	Jones, Donna	IMPD Unit Picker	The IMPD Picker was designed to be a pluggable search tool with a single look and feel. Meaning our goal was to provide a single interface that could search any defined datasource.	EWM	Web	Custom	PHP	Ora	acle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
74	Trevino, Juan	Jones, Donna	GAO Publication Database Search Utility (PubDB)	This application is used for general purpose searching of Doc_db to retrieve all types of products (except for accomplishment reports) including restricted, unrestricted, and limited official use reports, testimonies, CG decisions, and other written products.	EWM	Web	Custom	Java	Ora	acle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
75	Trevino, Juan	Jones, Donna	iComplaint	Used by OOI to track EEO complaints. A case management system.	EWM	Web	COTS	Java	Ora	acle	a, b, c, d, e, g,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low

76	Trevino, Juan	Jones, Donna	Interim Database Maintenance (IDBM)	The Interim Database Maintenance program (IDBM) is used to update or correct document records in DOC_DB. Users login to the application, search for a document record, and then access the rest of the application for updates before submitting the document.	EWM	Web	Custom	РНР	Oracle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
77	Trevino, Juan		Job Code Tracking Database	apades before submitting the document.	EWM	Web	Custom		??	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
78	Trevino, Juan	Jones, Donna	Recommendation Follow-Up System (Form 66)	This application is used to update recommendation status and other related information for products with at least one open recommendation. Following review/approval, the data are migrated to Doc_db and Docdblite. The Form66 application limits access based on LDAP permissions.	EWM	Web	Custom	PHP	Oracle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
79	Trevino, Juan	Jones, Donna	Records Management Information System (RMIS)	System used for tracking records sent over to National Archives. Has been superseded by GAORDS but there are still some permanent records in RMIS.	EWM	Desktop	Custom	PowerBuilder	Oracle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
80	Trevino, Juan	Jones, Donna	Product Assistance Group (PAG) Management and Tracking System (PMTS)	The PAG Management and Tracking System (PMTS) is an internal standalone application that is used by Knowledge Services staff to manage department workflow and track the progress of GAO publications. Note: The database is also used by the Survey Support people.	EWM	Web	Custom	Java	Oracle	a, b, c, d, e, g, k, o,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
81	Trevino, Juan	Jones, Donna	Record Deletion Utility (recdel)	The Record Deletion Utility program is designed to delete all records associated with a specific document from the DOC_DB, FORM66, or DOCDBLITE databases. Users are required to search on either an accession number or report number, and chose which database. AKA: MLMS Record Deletion Utility	EWM	Web	Custom	PHP	Oracle	a, b, c, d, e, g,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
82	Juan Trevino		Borland StarTeam	Application development configuration management software. 19 Starteam licenses (14 named, 5 concurrent).	TM	Client-Server	COTS		Oracle	a, b, c, d, e, g,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
83	Trevino, Juan	Jones, Donna	Recommendation Follow-Up Export (rfrpt)	One of Form66 reports.	EWM	Web	Custom	Java	Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
84	Trevino, Juan	Jones, Donna	Bibliographic Data Entry (BDE)	Bibliographic Data Entry (BDE) is used to create new document records and lead users through the process of indexing, cataloging, and abstracting of products that must be added to Document Database.	EWM	Web	Custom	PHP	Oracle	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
85	Baluch, Faiza	Jones, Donna	Active Assignments System	Active Assignments is an internal PHP/MYSQL based application for searching current active assignments from MATS and JIS	EWM	Web	Custom	PHP	MySQL	a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low

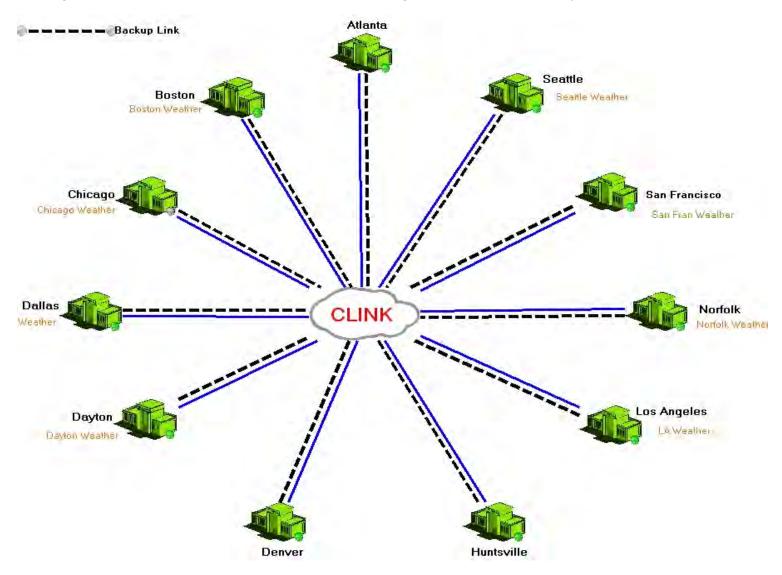
86	Baluch, Faiza	Jones, Donna	MATS Daily Download System (MATS DDS)	A system that extracts basic MATS engagement data from MATS and converts it the GAOVIEW.PAK file and MRJE tables	EWM		COTS		Yes		a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
87	Baluch, Faiza	Jones, Donna	United States Organization Table (USOrg)	Client Server Application that transforms selected federal leadership directories into a local data resource supporting engagement applications and product publishing and distribution.	EWM		COTS				a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
88	Baluch, Faiza	Jones, Donna	Integrated Reports Distribution System (IRDS)	Used by EOSC	EWM		сотѕ				a, b, c, d, e, g, k, o, p	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
89	Herndon, Shukeshia	Jones, Donna	Fraud Hotline Reporting System (FraudNet)	The purpose of FraudNet is to provide the US Government with a location where its citizens, government employees and officials can register complaints about specific or general conditions they believe are not in the best interest of the U.S. Government.	EWM	Web	Custom	Java	Yes	Oracle	a,b,c,d,e,fg,h,k,o,p	a, b, d: 12 times/Low c, e, f, g, h, k: 1 time/yr Xtra Low
90	Herndon, Shukeshia	Jones, Donna	ASM Weapons System Database (WSD)	ASM Weapon Systems Database (WSD)Used to by staff in Acquisition and Sourcing Management (ASM) to help assess the performance and risks of major weapon system programs.		Web	Custom	ColdFusion	Yes	Oracle	a,b,c,d,e,fg,h,k,o,p	a, b, d: 12 times/yr Low c, e, f, g, h, k: 1 time/yr Xtra Low
91	Herndon, Shukeshia	Jones, Donna	Financial Audit System (FAS)	A web-enabled system to support Financial Management and Assurance (FMA) team's workflow, and provides capabilities to establish and plan financial audits, manage these projects, support audit fieldwork analysis and results, and develop the audit report. The system supports the capture of information about organizations under audit (entities) and their financial information, financial management systems, and audit work performed by non-GAO auditors.	EWM	Web	Custom	ColdFusion	Yes	Oracle	a,b,c,d,e,fg,h,k,o,p	a, b, d, e: 20 times/yr Low c, f, g, h, k: 1 time/yr Xtra Low
92	Herndon, Shukeshia	Jones, Donna	Congressional Hearing System (CHS)	CHS is used to add/update information required to produce a notice of hearing for congressional testimonies.	EWM	Web	Custom	ColdFusion		Oracle	a,b,c,d,e,fg,h,k,o,p	a, b, d, e: 16 times/yr Low c, f, g, h, k: 1 time/yr Xtra Low
93	Trevino, Juan	Jones, Ruby	ACT! Premium for Web (ACT)	ACT! Premium for Web is a COTS web based package used by SPEL for managing key contacts, mail merges, and email blasts.	EWM		сотѕ				a, b, c, d, e, g,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
94	Trevino, Juan	Jones, Donna	Scholl Report (contrib_report)		EWM	Web	Custom	PHP		Oracle	a, b, c, d, e, g,	a, b, d: 12 times/yr X Extra Low c, k,o: 2 time/yr X Low e, p: 1 times/yr X Extra Low g: Weekly X Extra Low
95	Herndon, Shukeshia	Jones, Donna	Product Metadata Repository (PMR)	Web based system for users to input metadata and upload files of GAO products into PMR's data engine, and then using PMR's distribution engine release those products via the Internet, Intranet, and secure Extranets (for specific congressional recipients).		Web	Custom	PHP	Yes	Oracle/MyS QL/SOLR	a,b,c,d,e,fg,h,k,o,p	a, b, d, e: 12 times/Low c, f, g, h, k: 1 time/yr Xtra Low

97	Baluch, Faiza	Jones, Donna	Balsamiq Mockups	Software to assist with the creation of wireframes that will be used in the User Experience subproject and are widely used in industry. They allow for more efficient generation and updates that will better suit the iterative process we are aiming for.	EWM		COTS				a, b, c, d, e, g, f	a, b, d: 8 times/yr X Extra Low c: 2 time/yr X Low e: 1 times/yr X Extra Low g: Weekly X Extra Low f: 12 times/yr X Extra Low
98	<u> </u>		Subversion	An open-source revision control system	TM		сотѕ				a, b, c, d, e, g, f	
99	?		Test Director for Quality	HP (formerly Mercury) product. Integrated test	TM		COTS				a, b, c, d, e, g, f	
	•		Center	management solution providing comprehensive	110		6613				a, e, e, a, e, g, :	
			Center	testing capabilities for enterprise business								
				systems. Five licenses.								
100	?	?	Quick Test Professional	Automated software application testing.	TM		COTS				a, b, c, d, e, g, f	
	Baluch, Faiza	Ponti, Elena	RSA Authentication Agent		TM		COTS				a, b, c, d, e, g, f	a, b, d: 8 times/yr X Extra Low
	20.00, . 0.20	1 01101, 210110	for Web	business by controlling access to corporate							-, -, -, -, -, 3,	c, f: 2 time/yr X Low
			100 000	networks, web applications and operating								e: 1 times/yr X Extra Low
				systems. Used in conjunction with RSA SecurID								g: Weekly X Extra Low
				Authenticators and the RSA Authentication								
				Manager software, RSA Authentication Agent								
				software protects sensitive data assets stored								
				within the enterprise from unauthorized access.								
				RSA Authentication Agent software intercepts								
				access requests-whether local or remote-from								
				users or groups of users and directs them to the								
				RSA Authentication Manager program for								
				authentication. Once verified, permission to								
				access protected resources is granted. Seamlessly								
				integrated with existing systems, applications and								
				infrastructure, RSA Authentication Agent								
				software is embedded into an array of remote								
				access servers, VPN's, firewalls, web servers and								
				more.								
100			in and the		T. 4		COTC		<u> </u>			
102	?		jBoss 4.x	an open source Java EE-based application server	TM		COTS				a, b, c, d, e, g, f	
105	Ballard, Edward	Rishi, Ruby	HR Connect	HR Connect is Treasury's web-based human capital management solution built on the	НСМ	Web	сотѕ	PeopleSoft	Yes	Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: Daily - Extra Low
				PeopleSoft commercial-off-the-shelf platform.								o, p: 2 times - Extra Low
				HR Connect is used for Personnel Action								
				Processing, Payroll Processing, Benefits								
				Administration, Self Service for Employees and								
				Managers, Position Management, Onboarding								
				and Exiting amongst other functions.								
106	Ballard, Edward	Rishi, Ruby	Career Connector	CareerConnector is a staffing acquisition and	НСМ	Web	COTS	Java	†	Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low
				recruitment system built on the Monster								g, h, i, k: Daily - Extra Low
				Government Solution Platform. CareerConnector								o, p: 2 times - Extra Low
				receives applications online, assesses eligibility								
		1		and basic qualifications, relies on applicant self-					1			
				certification to automatically perform								
				certification to automatically perform rating/ranking, and generates a certificate for								

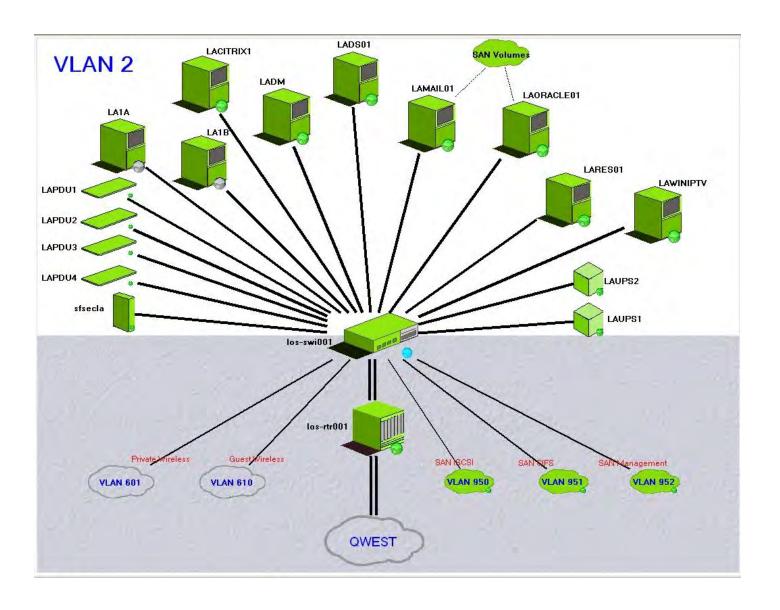
107	Ballard, Edward	Rishi, Ruby	Workforce Analytics	Workforce Analytics is a versatile business intelligence reporting tool that features an extensive library of standard demographic reports including EEO information, for managers and HR specialists. Workforce Analytics also provides a robust and easily accessible ability to create ad hoc HR reports as needed.	НСМ	Web	COTS	ВІ	Oracle	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: Daily - Extra Low o, p: 2 times - Extra Low
108	Ballard, Edward	Rishi, Ruby	Treasury Enterprise Directory Service (TEDS)	TEDS is Treasury's directory service that establishes account access to the HR Connect platform.	НСМ	Web	COTS			a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: Daily - Extra Low o, p: 2 times - Extra Low
109	Ballard, Edward	Rishi, Ruby	USAJobs	USAJobs is the federal government's official employment posting portal. USAJobs is used to post GAO vacancy announcements and allows applications to apply to open positions.	нсм	Web	сотѕ	Java		a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: Daily - Extra Low o, p: 2 times - Extra Low
110	Shrestha, Gaurab	Rishi, Ruby	FOCUS Reporting System (FOCUSRPT)	FOCUS is a reporting system used to create reports. FOCUS provides (1) report design/data retrieval from one or more National Finance Center (NFC) databases, (2) direct access to NFC databases via remote terminals, and (3) agency offices with ad hoc reporting capabilities on an asneeded basis.	нсм	Client Server	GOTS	Mainframe		a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: Daily - Medium o, p: 2 times - Extra Low
111	McGregor, Eeron	Rishi, Ruby;	SES/SL Appraisal	This competency based performance system for is for senior level executives.	ь НСМ	Client Server		Access	Access	a, b, c, d, e, g, h, i, k, o, p	a, b, d, e: 2 times - Extra Low g, h, i, k: 5 times - Extra Low o, p: 2 times - Extra Low
112		Rishi, Ruby; Jones, Donna; Dunn, Marianna	EOSC	webTA Reporting (biweekly) for HCO Self Certified Update (biweekly) for HCO Active Job Code (MATS/webTA) Update (daily) for GAO employees so that they can enter time into webTA Bargaining Unit Update (biweekly) for HCO Retirement Calculator Update (biweekly) external data feed – so that GAO employees can model their annuity at time of planned retirement Everbridge - Emergency Notification Maintenance (biweekly) external data feed – so that GAO can contact employees and contractors in case of an emergency HR-Connect (FTP Meta Push & Boarder Pull) Data Migrations (daily) Counseling Service Database (3) Support (as needed) SES Appraisal Support (annual) CFC FESI File Formatting (annual) Transit Benefit (biweekly) - Provide Transit Benefit Database Update Support and provide Monthly Metro Data Load Support as needed. Location Change & Metro Subsidy Update Support Employee Location Change (city/state/zip) Update & Reporting Transit Benefit (quarterly) - On a quarterly basis provide Transit Benefit Quarterly						a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p	a, b, d, e: 5 times - Extra Low g, h, i, j, k: Daily - Extra High o, p: 50 times - Low

GAO Field Offices (FO):

Los Angeles, San Francisco, Seattle, Denver, Dallas, Chicago, Huntsville, Atlanta, Dayton, Norfolk, and Boston



The following are list of devices in each Field Offices:



DESCRIPTION:

WINIPTV It is a Windows 2003 Server; running GAO IPTV locally in Field Offices

RES01 It is a Windows 2003 Server; it's a resource server for Novell delivered applications and Print Server

ORACLE01 It is a Windows 2008 R2 Server; it's a Oracle Server, hold Database for DM only

MAIL01 It is a Windows 2008 Server; it's a Field Office Mail Server

DS01 It is a Windows 2003 Domain Controller; Provide Authentication, DNS and DHCP for Field Offices

DM It is a Windows 2003 Server; it's a Document Management for Field Office

CITRIX1 It is a Windows 2003 Server; Support Remote Access Services for Field Offices

1B It is a Novell Server; user's Login Script and also support desktop imaging

1A It is a Novell Server; it's only provide Novell Authentication for Novell Client

EMC NX-4 It's a Data Storage for user's Home Directory; reside DM file; Oracle and Exchange

Cisco 6509-E it's Cisco Catalyst 6509 switch with Supervisor module with line card

Cisco 3945 Cisco 3945 Router with redundant DS3 Circuits (45Mbps) managed by CenturyLink

LA1A	Novell
LA1B	Novell
LA-CIFS	🌃 Maps
LACITRIX1	Nindows 2003 Server
LADM	Nindows 2003 Server
LADS01	Windows 2003 Domain Controller
LA-iSCSI	№ Maps
LAMAIL01	Windows 2008 Server
LA-Management	№ Maps
LAORACLE01	Nindows 2008 R2 Server
LAPDU1	masterSwitchrPDU
LAPDU2	△ズ masterSwitchrPDU
LAPDU3	masterSwitchrPDU
LAPDU4	△★ masterSwitchrPDU
LARES01	Nindows 2003 Server
LAUPS1	smartUPS 8000
LAUPS2	△ズ smartUPS
LAWINIPTV	Nindows 2003 Server

REQUEST TO INITIATE PURCHASE PARTS/TOOLS/ODCs AND/OR SERVICES (RIP)

Industry Partner: Client:		TOOL#: Date: Project Name: Project/IA#:	
** If the prime contractor has	an approved purchasing system the contractor will prepare	Contract/Task Order:	2) to be reviewed and signed by the COP
ii tile prime contractor has	an approved purchasing system the contractor will prepare	e dilu subilit a Nequest to ililitate Futchase (Nic	Last Inv submitted:
TO:	FEDSIM Contracting Officer Representative	CLIN # VALUE: CUM AMT BILLED: BALANCE:	\$0.00 \$0.00 \$0.00
FROM:	Requestor	RIP ESTIMATE:	\$0.00
THROUGH:	Client POC	BALANCE:	\$0.00
SUBJECT:	Request to Initiate purchase #		
Client Point of Contact	:		
PURPOSE/JUSTIFICATION	OF REQUEST:		

The purpose of this request is to

Below is the estimated cost of purchase:

ITEM	
Tool (CLIN #):	
Cost to Government: @#	\$ -
Fee	\$ -
General & Administrative (G&A) Cost	\$ -
Total Cost NTE:	\$ -

All material purchases shall be made in accordance with customer requirements. All materials shall become the property of the Government and shall be regarded as Government Furnished Property (GFP), and unless previously approved by the Contracting Officer, shall be used only in performance of this Task Order. All materials will be purchased in accordance with regulations contained in the FAR (need cited#) approved purchasing procedures. All Tools and ODCs shall be procured in accordance with contract requirements and shall not exceed the funded amount on this contract.

It is the responsibility of the Industry Partner to ensure that the prices quoted are fair and reasonable at the time of submission and are in the best interest of the client. The Industry Parner is to funish price quotes for hardware and software purchases.

Please contact me at (000) 000-0000 if you have any concerns or questions.

FEDSIM Approval:	
Signature	Date

i		
•		

GAO CURRENT IT INVENTORY REPORT April 2013

Laptop Models

APPLE MACBOOKPRO15 COMPAQ ARAMDAM300 COMPAQ EVON400C

HP 6910P HP 6930P HP NC4010 HP NC4200

LENOVO THINKPAD61P

Total 4563

Computers and Servers

APPLE /IPAD WIFI

AST 28616 AVAYA S3400 AVAYA S3500 AVAYA/8730 AVAYA/A175VDT AVID /SR2500

AVID /UNITY MEDIA AVOCEN TS3000 BLUECT SG400 1

BLUECT/PROXYSG8100

CISCO IPTV3425
CISCO IPTV565A
CISCO PIX515E
CITRIX/FIPS9700
COMPAQ AP550
COMPAQ DESKPRO
COMPAQ EVOW4000
COMPAQ P333

COMPAQ PROLIANT360
COMPAQ PROLIANT6500
COMPAQ PROLIANTDL360
COMPAQ PROLIANTDL380
COMPAQ PROLIANTDL580
COMPAQ PROLIANTML350
COMPAQ PROLIANTML370
COMPAQ PROLIANTML530
DELL /OPTIPLEX780

DELL /POWEREDGE R610AIM

DELL /PRECISION T5500 DELL /PROEDGE R610

DELL /R610 AES

DELL /SIPERA E10S SBC

DELL DHM

DELL POWEREDGE2850

DELL XPSR

ENDRUN PRAECISCNTP ENDRUN/TEMPUS LXCDMA

GTWY HV2000 HP /8530W

HP /DL360G7 CM

HP /DL360G7 MID3 SM HP /DL360G7 MID4 SMGR HP /DL360G7 RS1 PS

HP /HPG42

HP /PROLIANT X5550 DL360G6

HP /PROLIANT360PG8
HP /PROLIANTDL360G6
HP /PROLIANTDL360G7
HP /PROLIANTDL585G6
HP /PROLIANTDL585G7
HP /Z400 WORKSTATION
HP /Z800 WORKSTATION

HP DC5000

HP PROLIANTBL460C
HP PROLIANTDL320
HP PROLIANTDL320G5
HP PROLIANTDL360
HP PROLIANTDL380
HP PROLIANTDL380G5
HP PROLIANTDL580
HP PROLIANTDL580G4
HP PROLIANTML350

HP XW4000 HP XW4400 HP XW4600 HP XW6200 HP XW8600 IBM /X3250M2 IBM /X3650M2 **IBM 486**

IBM LUGGABLE IBM NETVISTA

IBM P615

IBM SYSTEMX3650

IBM X306 IBM X3550 MAC /A1347

MCAFEE/FAP 1000MDSG

MCAFEE/MVM3100

ORACLE/SUNETRA X4270

QUANTM M4100

RSA SECURITY/SECURE ID

SIM /257X SIM IMS SNAP 4500 SOURCE RA

SOURCE RA2000 SUN NETRA210 SUN SUNFIREV240 SUN SUNFIREV250 SUN SUNULTRA10 SUN ULTRASPARCIIII

UNISON 30160001000

Total 1849

Monitor Models

APC AP5015
APC SMART1400
DELL 1800FP
DELL 1905FP
DELL 1907FP
DELL 1908FP
DELL E198FP
DELL E2209W
IBM THINKVISION

LENOVO THINKVISIONL192P

NEC LCD1850E NEC LCD1855NX VSONIC VP211B

Total 4049

Printer Models

CANON BJC 85 COMPAQ PAGEMARQ20 HP /LASERJET5550DTN HP /LASERJET9050

HP 3800 HP 4000TN HP 5000 HP 5100DTN HP 5500DN

HP DESKJET5150 HP DESKJET5740 HP DESKJET6940 HP LASERJET4350

HP PSC1210 HP PSC750

XEROX /PHASER3635MFP XEROX INFOPRINT1552 XEROX PHASER7300 XEROX PHASER7750

Total 645

Scanner Models

AVISON AV610

CANON SCANFRONT220

EPSON 2400

EPSON 4490PHOTO

EPSON EXPRESSION1600

EPSON J141A

EPSON PERFECTION1240U EPSON PERFECTION1640SU EPSON PERFECTION1650 EPSON PERFECTION4900 EPSON WORKFORCEGT1500

FJT M3096E

FJT S500SCANSNAP

HP 4500C HP C6270

HP SCANJET4300CSE HP SCANJET5100C HP SCANJET5300C HP SCANJET8250 KODAK 3520P MIN MS6000

PSC POWERSCAN

PTECHNO MC3000 SYMBOL LS3478 ZEBEX Z3080 ZEBEX ZB8110

Total 123

Copier Models

PAN KXB520 QUO Q02000 RICOH WB1 SHARP SF2414 SMARTB SB560

XEROX 4110 XEROX 5328

XEROX DC332 XEROX DC440

XEROX DIGITALBOOKMARK

Total 13

Multifunctional Device Models

XEROX WORKCENTRE5030 XEROX WORKCENTRE5638 XEROX WORKCENTREPRO35 XEROX WORKCENTREPRO55 XEROX WORKCENTREPRO65

Total 136

Fax Machine Models

BRO 2920 BRO 770 BRO FAX2800

BRO INTELLIFAX2910 BRO INTELLIFAX3800 BRO INTELLIFAX4750

BRO MFC4550 BRO MFC4800 CANON 830i CANON B640 CANON B740 CANON CFXL4000 CANON CFXL4500

CANON LASERCLASS2050 CANON LASERCLASS710

CANON LC2060 CANON LC5500 FJT DEX150 HP 200 HP 920

ILEX 795SF ILEX 890SF

ILEX 890SFK OKIFAX 2300 PAN KXFL511 PAN KXFP200

PAN PANAFAXUF755

PAN UF744

Total 81

Network Hardware Models

APC AP5201 AVOCEN

AUTOVIEWCOMMANDER

BBC KV134AR2

BBC SERVSWITCHAFFNITY

CISCO 1548U

CISCO 24PORT3560G

CISCO 2500 CISCO 2611XM CISCO 3600

CISCO 48PORT2960 CISCO 48PORT3560G

CISCO 6506 CISCO ASA5510 CISCO C4700

CISCO CATALYST2923M CISCO CATALYST2924M CISCO CATALYST2948G CISCO CATALYST2950G CISCO CATALYST6503E CISCO CATALYST6509 CISCO CATALYST6513 CISCO FIREWALLBLADE

CISCO RJ45

CISCO SUP720LAB

CYBEX AUTOVIEWCOMMANDER

DATACOM SS1000BT

HAWK CS168 HP MSA30

JUNIPR NS204001 JUNIPR NSO25001TAA JUNIPR SA2500

NETGEAR FS524

NETOPTC TPCU3

NOKIA IP40

SLOGIX ETM1012

SOURCE 3D1000

APC SMART1250

APC SMART1400

APC SU2200NET

APCPOWERDISTRIBUTIONUNIT

AVAYA PW9125

AVID /MEDIA ARRAYXT

 SLOGIX E1M1012
 AVAYA PW9125

 SOURCE 3D1000
 AVID /MEDIA ARRAYX

 SOURCE DC1000
 AVOCEN/8PORT KVM

 SOURCE DC3000
 AVOCEN/ECS19

 SOURCE IS5800
 BBC ACR2004A

 SOURCE MC1000
 BLUE WG2000

 SOURCE NS2000
 BLUECT/AV1400A

 TPOINT 210E
 BLUECT/PROXYAV810

COMPAQ PROLIANTDL380 BLUECT/SG9000G
HP /8530W BRO /DS MOBILE600

HP /PROLIANT X5550 DL360G6 BROCAD 3800
HP /PROLIANT360PG8 BUF /1TB

HP /PROLIANTDL360G6 BUF 500GB
HP /PROLIANTDL360G7 CANON /SCANLIDE210
HP /PROLIANTDL585G6 CISCO /24 PORT 3750G
HP /PROLIANTDL585G7 CISCO /24PORT2960G

AVAYA S3400 CISCO /24PORT3560E

AVAYA S3500 CISCO /2811 AVAYA/8730 CISCO /2921 AVAYA/A175VDT CISCO /3945

Total 355 CISCO /48 PORT3750G

Other IT Device Models

ACDATA/PUREDRIVE 1TB

CISCO /5508

CISCO /AP3600

CISCO /ASA5520

ACDATA/PUREDRIVE 500GB CISCO /CATALYST24PORT

ADDTEC/AE5SACSU2 2560X

APC /SMART UPS 6000VA

ADIC FASTSTOR2

ADIC SDLT320

ADIC VLSDLT400

AJA /KUMO1604

ALLPRO ZEUSAU9SERIES

APC /SC 450VA

CISCO /MSE3300

CISCO /RJ45V

APC /SMART UPS 1500VA CISCO /WSX6148E GE 45AT CARD

APC /SMART UPS 6000VA CISCO 2621XM
APC /SMART UPS 8000VA CISCO 2800
APC /SMART UPS RT 5000VA CISCO 2801
APC /SMARTUPS1500VA CISCO 2821

APC /SMARTUPS1500VA CISCO 2821
APC /SUA2200XL CISCO 3845
APC AP5015 CISCO 7206VXR
APC AP5017 CISCO ASA5550

APC MATRIX5000 CISCO MDS9124

CISCO MODULEWSX6748GETX

CISCO SWITCHPROBE COMPAQ 4080GBDLT COMPAQ EK1514 COMPAQ/L2206TM

CONTEX/HD ULTRA i4250S

COREX 500

DATACOM SS101BTBT6C

DLINK /24PORTGB

DROBO /D800I

DROBO /DRPRI A PRO

JUNIPR/S.
L3COMM/.
LEADER/L

EATON /BLADEUPS EIMAGE/SCANPRO2000

EMC2 /GEN4RPA EMC2 /NS960FC EMCINC/NX4 FANTOM FDU120 FJT /FI6770A

FJT /FI6800

FLUKE /OPTIVIEW XG FREEDM/TOPAZ CCTV GTECH/GSPEEDES HANNSG/HZ281HPB

HP /MODULAR SMART ARRAY

2324FC

HP /STORAGEWORKS MSA70

HP /ZR24W HP BLPBLADE HP DVD200I HP ESL9595 HP EVA8000 HP MSA1000 HP MSL2024 HP SDLT320

HP SMARTARRAY30

HP SMARTARRAYCLUSTER HP2510PDOCKINGSTATION

HPADVANCEDDOCKINGSTATION

I ONE /SCORPIUS P7

IBM 3490F01 IBM 42U IKAN/VX9S INNOV INN8668 INTEL /R1IAT11

IOMEGA HDD120

IOMEGA V2000S IOMEGA Z100 IOMEGA Z250 IOMEGA ZIPDRIVE

ITRIGY/SUPERMICRO5123
JLINFO CHATPOWERPLUS

JUNIPR/J2350 JUNIPR/SA4500 JUNIPR/SA6500 L3COMM/3030 LEADER/LV5800

LENOVOADVANCEDMINIDOCK LENOVOTABLETULTRABASE LENOVOUSBPORTREPLICATOR

LFGOOD/FLATTRON LINKS PS2KVM4 LINKS WRT35ON MARSHALL/VP44

MARSHALL/VR72P2HDSDI

MAXTOR 3000LE MAXTOR 5000XT MAXTOR ONETOUCH

MAXTOR ONETOUCH250GB MAXTOR ONETOUCHII

MAXTOR ONETOUCHIII MCFLEX/CE3240B MOJACK 600

NETAPP FASA2020 NOKIA IP380

OLD L490ETSS

OLY OLYMPIA15008C OPNET /ARX4200 PAN VWBN1 PAS 20MB

PHI TD363021 PION /PDP505CMX PRX DP9300

QLOGIC/4062C

QLOGIC/SANBOX5602 16PORT

QUANTM LS00

QUANTM/SCALAR I500 RARTN /16 PORT KVM RARTN /8 PORT KVM

RARTN /KSK II

RARTN /QUICKTRON KVM

RIMAGE 5661C

RSA SECURITY/SECURE ID

SEAGAT 400GB

SEAGAT FREEAGENT500GB

SEAGAT/FREEAGENT 1.5TB

SEAGAT/FREEAGENT 1TB

SEM CDROMDECLASSIFIER

SHARP QA75

SIM /4190

SIMPLE 320GB

SIMPLE 9000 40479 002

SMCNET/24PORT KVM

SONY DRX510UL

SONY DRX710UL

SONY MXDD3

SOURCE/3D2000

STARDM/I302ISWBS2

SYMBOL/LS3578

TRIPP /LCD RACK CONSOLE

TRIPP /SMART1500LCD

USROBOT/FAX MODEM5686E

WACOM XD0912R

WDIGIT WD1200B008 RNN

WDIGIT WD500GB

WDIGIT WD800B005RNN

WDIGIT/HDD2TB

WDIGIT/MY PASSPORTSE 1TB

WDIGIT/WDBAAU0030HBK

YAMAHA GLTCIN16

Total 3113

Provider and Tools	,	Reference	
N/A	 Avaya Automated Call Distribution (ACD) system Hewlett Packard Asset Manager 	C.2.4.1.1	Plan to implement the Change Management Module of ITSM during CY 2013.
	such as Nagios, Solarwinds, etc. • Novell Tools • New Hire/Exiting Employee Tracking System • All necessary equipment and		
	T OTROPIO		
	BlackBerries, Nextels, • External hard drives and data transfer cables for file transfers • Miscellaneous hardware/software tools • All necessary equipment and Workspace		Di c
	All necessary equipment and Workspace		Planning for and implementation of larger scale provisioning activities (new notebooks, new SecurlD tokens, new images, etc.) Activity will dictate the tools required.
	N/A	Avaya Automated Call Distribution (ACD) system Hewlett Packard Asset Manager Network monitoring tools such as Nagios, Solarwinds, etc. Novell Tools New Hire/Exiting Employee Tracking System All necessary equipment and Workspace Fluke multimeters, BlackBerries, Nextels, External hard drives and data transfer cables for file transfers Miscellaneous hardware/software tools All necessary equipment and Workspace See note See note All necessary equipment and	Avaya Automated Call Distribution (ACD) system Hewlett Packard Asset Manager Network monitoring tools such as Nagios, Solarwinds, etc. Novell Tools New Hire/Exiting Employee Tracking System All necessary equipment and Workspace Fluke multimeters, BlackBerries, Nextels, External hard drives and data transfer cables for file transfers Miscellaneous hardware/software tools All necessary equipment and Workspace See note All necessary equipment and

Services Category	Third Party Service	GAO Furnished Property (GFP) and Tools	SOW Section	Comments/Projections
	Provider and Tools		Reference	
Inventory Management		Hewlett Packard Asset Manager software		
(Receipt, Tracking and		• BlackBerries		
Distribution/Logistics)		• Nextels		
		Barcode Scanners		
		Degaussing equipment		
		Disk duplication gear		
		Disk grinder		
		Software carousel storage systems		
		 Miscellaneous hardware and software 		
		Secured Workspace and Storage Areas		
Basic Repair and		Hewlett Packard Asset Manager		
Warranty Management		Barcode scanners		
		Secured Workspace and Storage Areas		
		 Miscellaneous tools and supplies needed to conduct 		
		repairs on IT equipment		
Operations/Network Services				
Release Support				
Software Distribution	N/A	• Zen for Desktops		
Licensing & Metering	N/A	Microsoft Software Assurance		
Licensing & Metering	IN/A	Juniper SSL VPN License		
		• Zen for Desktops		
Patch Management		• WSUS		
Paten Management				
		• Zenworks for Desktops		
Test Center Support		HP Quality Center Software / Unified Functional	C.3.5.5.15.2	
		Testing		
Release				
Implementation &				
Migration				
Application and Tools Support				
Management Tools		• Nagios		
Č		• Solarwinds		
		Remote Administration		
		Remote Desktop Client		
		Novell Zenworks Admin		
Document		OpenText		
Management		• eDocs		

Services Category	Third Party Service	GAO Furnished Property (GFP) and Tools	SOW Section	Comments/Projections
	Provider and Tools		Reference	
		• eDocs/RM Administration		
		• Embarcadero		
		• JRB Utility Software for AD modification		
		A.Phillips@lancaster.ac.uk		
		• http://www.svsinternals.com		
		• Famatech LLC		
		Helios Software Solutions		
		• RapidSQL		
		Programmer's File		
		Editor PKZip Microsoft		
		Remote Administrator		
		• TEXTPAD		
		MS Visual Studio		
		• ZtreeWin		
		• AppSightSystem		
		• Black Box (Docsfusion diagnostics)		
Messaging Services		• Exchange		
messaging services		Archive Manager		
		• Trend Micro		
		• SPAM		
		• Rpost		
		Trend Micro Server		
		Blackberry Enterprise Server for Exchange and Mobile		
		devices (Good Technology)		
Directory Services		Novell Tools		Monitor, managing
Directory Services		• Console One		and ensuring the
		• DS Browse		health of GAO's
		• DS Trace		directory services,
		• JRBUtils		Active Directory
		• JRBouis		Active Directory
OC Cross out		Red Hat Enterprise Linux (RHEL)		
OS Support • OS Provisioning		MS Windows 2003 / 2008 – R2		
• Account Management		• IIS		
• Performance & Tuning		• Acronis		
Patch Management		• True Image Server		
		• WSUS		
		Linux Red Hat Open Source		
		• Apache		
		• Tomcat		
		Cold Fusion		

Services Category	Third Party Service Provider and Tools	GAO Furnished Property (GFP) and Tools	SOW Section Reference	Comments/Projections
	Provider and Tools	• PHP	Keierence	
		• JAVA		
		• MySQL		
		• Mediawiki		
		Moveable Type		
		• Vbulletin		
		• JRUtilities		
Application Hosting		Application Hosting		
Facility Management				Management of the
				Data Center,
				environmental
				issues, space, power,
				air conditioning
				concerns.
Storage Management				
Storage Resource	N/A	• EMC Secure Remote Support, (ESRS)		
Management		EMC Replication Manager		
		• HP SANMGR		
Define, Track,	N/A			
Maintain Data & Data				
Resources				
Backup, Restore,	N/A	• Windows 2008 Server (Used for Quantum i500)		
Recovery		Symantec's NetBackup Enterprise Software		
Engineering		1 2	1	
Design and		See service design categories for a detail description,		
Engineering		documentation and tools		
 Desktop Engineering 				
 System Engineering 				
 Network Engineering 				
	etwork Infrastructure an	d Services	•	
1.0 Networking			.	
1.1 Wide Area	GSA Networx -	Devices:	C.3.5.16	
Network (WAN)	CenturyLink MPLS	• Cisco routers (7206)		
	WAN Service	• VXR router (ACF)		
	Access Circuits:	• Cisco switch 6500 series HQ		
	• T3 circuits (Field			
	Offices),	Tools:		

Services Category	Third Party Service Provider and Tools	GAO Furnished Property (GFP) and Tools	SOW Section Reference	Comments/Projections
	• Gigabit Ethernet • 200mb (HQ) • OC3 ACF Devices (aka Service Enabling Device – SED): • Cisco routers (3945 Routers at Field Offices) Tools: • CenturyLink Networx Portal epartment Of Transportation (DOT) Access Circuit: • T1 (HQ) Devices: • DOT Cisco 2800 • Router (HQ)	Solarwinds Source fire IDS Cisco Secure Access Control Server (ACS -TACACS) Cisco Network Compliance Manager (NCM) Fluke One Touch (Cable Analyzers JAVVIN Protocol Analyzers Fluke optiview tablet		
1.2 Metropolitan Area Network (MAN) Services	GSA WITS3 Verizon - Transparent LAN Service (TLS): Access Circuit: 10mg Pentagon and HQ	Devices: • Cisco routers (2621XM routers in Petagon) • Cisco routers (6500 series switch t HQ and ACF) • Cisco 4503 switch • Cisco 3560 switch at ACF (CAPNET) • Cisco 3750 Switch at ACF	C.3.5.16	
	Government Owned and Managed Cloud: Access Circuit: • Dense Wavelength Division • Multiplexing (DWDM) • 2 Gigabit (HQ and	Tools: • Solarwinds • Source fire IDS • Cisco Secure Access Control Server (TACACS) • Cisco Network Compliance Manager (NCM) • Fluke One Touch (Cable Analyzers • JAVVIN Protocol Analyzers • Fluke Optiview tablet		

Services Category	Third Party Service Provider and Tools ACF) Government Owned and Managed Fiber Ring (CAPNET) (HQ and ACF) Access Circuit: Gigabit HQ & ACF	GAO Furnished Property (GFP) and Tools	SOW Section Reference	Comments/Projections
1.3 Local Area Network (LAN) Services	N/A	HQ and Field Office Wired LANs Devices: Cisco 6500 series switches with SUP 720 or 32 modules, Cisco 3560 Switches Cisco 3750 Switches Solarwinds Cisco Secure Access Control Server (TACACS) Cisco Network Compliance Manager Fluke One Touch (Cable Analyzers-JAVVIN Protocol Analyzers Fluke Optiview HQ and Field Office Wireless LANs (WLAN) Devices: Cisco Wireless Controller Service (HP Server) Cisco 5508 Wireless Controller Cisco 3310 Mobility Services Engine (MSE) Cisco 3502 Wireless Access Points (WAPs) Cisco 3600 series Wireless Access Points (WAPs) Tools: Fluke Optiview Air Magnetic WiFi Analyzer Cisco Wireless Intrusion Detection and Prevention	C3.5.16	GAO is in the process of enhancing the WLAN design which includes upgrading the wireless controllers, access points, and WiFI client software.
1.4 Internet Access	CenturyLink GSA	Devices:	C3.5.16	

Services Networx Internet Services Networx Internet Services Access Circuits: -300MB (HQ) -0 C3 (ACF) Devices: Fortinet Firewalls (HQ & ACF) -1 Cisco 7204 VXR routers -1 Cisc	Services Category	Third Party Service	GAO Furnished Property (GFP) and Tools	SOW Section	Comments/Projections
• IPSEC Tunnels via HQ and ACF Internet to NFC, AAC, and DOT Devices: • Cisco ASA 5510 Firewalls at HQ, ACF Tools: • Solarwinds • Fluke One Touch (Cable Analyzers- • JAVVIN Protocol Analyzers 1.6 Remote Network Services Devices: • Juniper SA5000 and 6000 series (HQ, ACF) • Remote Access Web Page • Cisco 3560 Switch (HQ) • SSL PORTAL ACCESS • Network Connect • SSL SECURE MEETING • TERMINAL SERVICES	Services	Service: Access Circuits: • 300MB (HQ) • OC3 (ACF) Devices: • Fortinet Firewalls (HQ & ACF) • Cisco 7204 VXR	3560 series (HQ, ACF) Tools: • Solarwinds • Cisco Secure Access Control Server (TACACS) • Cisco Network Compliance Manager (NCM) • Fluke One Touch (Cable Analyzers-	Reference	
Services • Juniper SA5000 and 6000 series (HQ, ACF) • Remote Access Web Page • Cisco 3560 Switch (HQ) • SSL PORTAL ACCESS • Network Connect • SSL SECURE MEETING • TERMINAL SERVICES	1.5 Extranet Services	N/A	 • IPSEC Tunnels via HQ and ACF Internet to NFC, AAC, and DOT Devices: • Cisco ASA 5510 Firewalls at HQ, ACF Tools: • Solarwinds • Fluke One Touch (Cable Analyzers- 	C.3.5.16	
1.7 Voice	Services VPN (SSL)		 Juniper SA5000 and 6000 series (HQ, ACF) Remote Access Web Page Cisco 3560 Switch (HQ) SSL PORTAL ACCESS Network Connect SSL SECURE MEETING TERMINAL SERVICES 	C.3.5.16	

Services Category	Third Party Service Provider and Tools	GAO Furnished Property (GFP) and Tools	SOW Section Reference	Comments/Projections
1.8 Video				
1.8.1 Video Conferencing	GSAWITS3 Verizon VTC Bridge Service: Devices: Multipoint Control Unit (MCU) Architect of the Capitol (AOC) Integrated Services Digital Network (ISDN) Services: Access Circuit: T1/ISDN	 Devices: Polycom VSX 8800 codec with/Camera and Microphone. DVD/VHS Recorder and PC RGB connector/graphic convertor. Tandberg 6000 series codec with /Camera and Microphone. DVD/VHS Recorder and PC RGB connector/graphic convertor. Polycom HDX 7000 codec (Secure VTC –SIPRNET) with /Camera and Microphone. Tools: PeopleCube/Asure VTC Scheduling Tandberg Management Suite (TMS) 	C.3.5.16	GAO currently operates and maintains 48 VTC Polycom/Cisco systems. GAO projects at least half of these VTC systems will be replaced by wide angle web cameras in FY14. VTC Meet & Greet services provided by the help desk/ floor support will decrease. In addition, VTC scheduling assistance provided by the help desk and VTC team will decrease. VTC is migrating off the ISDN network onto the IP network. ISDN circuits will be decommissioned in FY014.
1.8.2 Cable TV (CATV)	GSA Cable TV Subscriptions: Access: Direct TV Comcast Capital Connection Devices: CATV demodulators (HQ and Field Offices)	Devices:	C.3.5.16	Select cable TV channels are broadcast via IP/TV (aka GAOTV) and a limited number of televisions within HQ. Field offices have various local CATV subscriptions which are broadcast locally via IP/TV (aka. GAOTV).
1.8.3 Streaming Video Internet Protocol Television (IPTV- GAOTV)	N/A	Devices:	C.3.5.16	

Services Category	Third Party Service Provider and Tools	GAO Furnished Property (GFP) and Tools	SOW Section Reference	Comments/Projections
1.8.4 Web Conferencing	GSA WITS3 Verizon Web Conferencing (WebEx) Service: Tools: Verizon WebEx Portal (e.g. Admin reports and documentation) Verizon WebEx User Portal (e.g. documents, training, scheduling, login)	Devices: • Web Cameras (Logitech 910, 950)	C.3.5.16	GAO is provisioning WebEx host accounts agency-wide. Web cameras are connected to GAO PC's via USB. Wide angle web cameras and WebEx will replace at least half of GAO's VTC systems.
1.8.5 Video Phones	GSA Fed Relay (Sorenson) Service: Devices: Deltek Video Phone GSA WITS 3 Verizon Digital Subscriber Line (DSL) Service: Devices: DSL Router	N/A	C.3.5.16	
1.8.6 Telecommunications Integration and Test Lab	N/A	Devices: • Cisco switches and routers	C3.5.16	
1.8.7 Mobility			C3.5.16	
1.8.7.1 Smartphone Gateway	Blackberry Service Devices: Blackberry smartphones Good Technology Service: Devices: Personally owned smartphones (e.g. Android and IOS)	Smartphone Gateway: Devices: HP Servers (HQ) Tools: Blackberry Enterprise Server (BES) smartphone gateway application Smartphone Gateway: Devices: HP Severs	C3.5.16	

Services Category	Third Party Service Provider and Tools	GAO Furnished Property (GFP) and Tools	SOW Section Reference	Comments/Projections
	Frovider and roots	m .	Kelerence	
		Tools: • Good Technology smartphone gateway application and client software		
Security				
Pretection and Century Link Detection Services Century Link Fortinet	Century Link (HQ) Century Link (ACF) Fortinet	Internet Perimeter Firewalls		Part of Networx Contract for managed firewall services
	Internet access to remote business partners using Century Link	Extranet Services: VPN Tunnels from GAO to NFC, AAC, DOT and Treasury Firewalls (Cisco ASA 5500 series, HQ and ACF)		GAO devices and GAO management of the devices
		Network and Host Intrusion Detection Sourcefire IDS, Sourcefire RNA, Symantec Endpoint Protection, Cisco WCS, Tripwire IDS		May change due to new virtualized environment
	Internet access using Century Link	Web (Internet) Monitoring • Websense, • Bluecoat SG, • Bluecoat virus scan (Sophos)		Potential implementation of network malware detection – FireEye
		Anti-Virus • TrendMicro Interscan Suite, TrendMicro Office Scan, • TrendMicro Server Scan, Symantec Endpoint • Protection		
		Anti-Malware		
		Encryption McAfee Encryption (Safeboot) (full disk and authentication)		
		Event Correlation • NetForensics SIM-ONE,		Potential implementation of centralized system logging –

Services Category	Third Party Service	GAO Furnished Property (GFP) and Tools	SOW Section	Comments/Projections
	Provider and Tools		Reference	
		• IP Audit		solution unknown
		• Tripwire		Potential implementation of
				network malware detection -
				FireEye
		Vulnerability Scanning		Managed by the Network
		McAfee Vulnerability Manager (Foundstone)		Operations Group (NOG)
		Internal and Host Network Firewall		Varying requirements
		Cisco ASA Firewall, Cisco ACL, 802.1x, Symantec		coordinated with the Network
		Endpoint Protection		Operations Group (NOG), policy
		Endpoint i fotection		validation a Security
		T 11.0		Requrement
		Email Security		Used as primary internet SMTP
		TrendMicro Interscan Suite		Gateway
		Authentication		Required for desktop,
		RSA SecurID		application, and remote access.
				Managed by Network
				Operations Group (NOG)
Governace & Policy				Potential implementation of
Services				Security for a System
Sel vices				Development Lifecycle using
<u> </u>		T' C I' M		Agile (SDL – Agile)
Compliance Services		Tripwire Compliance ManagerHP Web Inspect		
Authorization Services		Custom Applications (ELOG)		
Classified Network		Cisco ASA Firewall, Juniper Firewall, Cisco Router,		Potential implementation of new
Chassified 1 (ct work		• Cisco Switch		authentication mechanisms—
		Windows servers, workstations and email		Secure NSS Card
		Custom IDS		
				11 locations – contract support
		Tanberg VTC Equipment		only at HQ
				IDS managed by Computer
				Network Defense Service
				Provider
Operational Readiness	T	CAO Work More compant System	C 2 5 5 17 1	1
Project Management		GAO Work Management System	C.3.5.5.17.1	
		(WMS)		

Services Category	Third Party Service Provider and Tools	GAO Furnished Property (GFP) and Tools	SOW Section Reference	Comments/Projections
Integration & Test				See Tier 2 service
_				categories for a
				description of
				provided services
				and tools
Publishing and Dissemin	nation	1	Т	1
Electronic Publishing		Hardware:		
Technical Support		• HP 6910 Laptops		
Electronic Publishing		• HP XW6200		
Visual Communications		Primera Bravo II Disc Publisher		
Support		• Epson Flatbed Scaners		
		ViewSonic and Dell Monitors		
		 Workstations Running Windows XP Software 		
		Lynda.com subscription access		
		Adobe applications:		
		 Adobe CS Web Premium suite, including 		
		DreamWeaver, Flash Professional, Media Encoder, and		
		InDesign, PhotoShop and Illustrator applications		
		• LiveCycle		
		After Effects		
		• Acrobat 9/X Professional,		
		• InCopy		
		• FrameMaker 7 and 8		
		• Lightroom		
		Preflight/prepress applications; e.g., Enfocus PitStop		
		Professional		
		Microsoft Suite 2007 applications:		
		• Word		
		• PowerPoint		
		• Excel		
		Multimedia, Web and interactive tools for		
		illustration and animation products:		
		• Audacity		
		• XML and JavaScript coding, and jQuery JavaScript		
		library		
		• Google Visualization tools (VIS, Charts) and similar		
		interactive web tools		
		• Fusion Charts, Maps		

Services Category	Third Party Service	GAO Furnished Property (GFP) and Tools	SOW Section	Comments/Projections
	Provider and Tools		Reference	
		Axialis Icon Workshop		
		• Typhoon software for creating AutoRun		
		• Teleport Pro (used to download webpages)		
		• Various web browsers (including Firefox, Internet		
		Explorer, Google Chrome, Safari)		
		• Video conversion and editing tools; e.g. Movea SWF		
		utility, AVS video converters and editors		
		• Visual Basic		
		• Javascript		
		• FrameScript.		
		Preflight/prepress applications:		
		• Enfocus PitStop		
		PDF editing and diagnostic tools		
		 Apago PDF Enhancer used for repairing PDFs 		
		Color calibration tools		
		Monaco Optix XR Pro		
		•		
		Section 508 accessibility tools:		
		• JAWS		
		• OmniPage		
		NetCentric CommonLook Office		
		NetCentric CommonLook PDF		
Web Services				
		• HTML/HTML5/XHTML/XML/RSS		
		Adobe Web Premium Suite		
		• Dreamweaver		
		• Flash		
		• Fireworks		
		• Photoshop		
		Adobe Illustrator		
		Adobe Acrobat Professional		
		Adobe Captivate		
		• Ajax		
		Moveable Type		
		• Microsoft Office Suite		
		• WordPress		
		• Perl		

Services Category	Third Party Service	GAO Furnished Property (GFP) and Tools	SOW Section	Comments/Projections
	Provider and Tools		Reference	
		• PHP		
		• Java		
		• Javascript		
		• SOLR - Search Engine		
		• SubVersion		
		• Listserv		
		• ITSM		
		• Linux		
		• Apache		
		• Tomcat		
		• Oracle		
		• MySQL		
		• Google VIS		
		• Fusion Charts/Maps		
		Various web browsers (including Firefox, Internet		
		• Explorer, Google Chrome, Safari)		
		Explorer, Google Chrome, Sularry		
Enterprise Architecture	e			
Enterprise and Segment	CEB IT Roadmap	Visio, MS Office Suite. MS Project		Annual subscription to CEB IT
Architecture Support	Builder	,		Roadmap B uilder
Business Analytical		Visio, MS Office Suite		
Services				
Business Intelligence Services		ERwin, Visio, MS Office Suite, Pentaho		
Enterprise Data	CEB IT Roadmap	ERwin, Visio, MS Office Suite		Annual subscription to CEB IT
Management	Builder	Zitvini, visio, nis omee saite		Roadmap B uilder
Application Development				
Application		• Java		
Development and		• PHP		
Support		• Perl		
rr ·		• JavaScript		
		Oracle Database		
		Oracle MySQL Database Microsoft SQL Database		
		• PL/SQL		
		Linux System Administration		
	1	Windows System Administration	i i	1

Services Category	Third Party Service	GAO Furnished Property (GFP) and Tools	SOW Section	Comments/Projections
	Provider and Tools		Reference	
		Pentaho BI Platform		
		Liferay Portal Enterprise		
		• XML		
		• HTML		
		Adobe Cold Fusion		
		Microsoft Visual Basic and VBA		
		Microsoft Access		
		Sybase PowerBuilder		
		• C/C++		
		Sencha Architect Enterprise Edition		
		Atlassian JIRA, Greenhopper and Confluence		
		Borland StarTeam		
		Apache Subversion (SVN)		
		• CA Erwin Data Modeler		
		• HP Quality Center		
		• Balsamiq		
		Microsoft SourceSafe		
		TVII CIOSOTV SOULOSSULO		
	USDA National			
	Finance Center:			
	Payroll Personnel			
	System			
	Mission Assignment			
	Tracking System			
	(MATS)			
	(11112)			
	Dept. of			
	Transportation/ESC:			
	Delphi Financial			
	Mgmt. System			
	Kintana			
	Markview			
	PRISM			
	US Bank Purchase			
	Card			
	Dept. of Treasury:			
	HR Connect			
	Career Connector			
	Workforce Analytics			

Services Category	Third Party Service	GAO Furnished Property (GFP) and Tools	SOW Section	Comments/Projections
	Provider and Tools		Reference	
	Treasury Enterprise			
	Directory Service			
	(TEDS)			
	Dept. of Veterans			
	Affairs:			
	Engagement Reports			
	Financial and T&A			
	Data			
	Northrop Grumman:			
	GovTrip			
Applied Research & M	 ethods Mainframe Suppo	 ort		
Specialty Networks				
SIPRNET (Classified)	DISA T-1 Links to	At each site:		
	HQ, Boston,	• Checkpoint Firewall (1)		
	Atlanta, Norfolk,	Sourcefire IDS (I)		
	Dallas, Denver,	• Cisco 2950 Switch (1)		
	Dayton, Seattle,	• Cisco 2900 Router (1)		
	Los Angeles, San	• HP DL380 Server (1)		
	Fancisco	• Windows 2003		
		• HP 6000 Series Workstation (4)		
		• HP 6400 Laptop (standalone) (60)		
		• Windows XP		
TAX (HQ site only)		• HP DL 380 Server (1)		
		• Windows 2003		
		• HP 6000 Series Workstation (3)		
		• HP 6400 Laptop (standalone) (20)		
		Windows XP		

Hardware Break-Fix Incident Breakdown By Select Categories for Last 12 Months

		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Total		22	53	44	58	43	53	53	37	38	40	47	37	25	550
Hardware	Total	22	51	43	56	42	52	53	37	37	37	45	37	24	536
	Problems w/Printer	8	27	19	25	16	28	25	18	16	13	24	20	16	255
	Problems w/Internal Hard Drive	1	8	3	5	5	6	6	2	2	6	6	6	2	58
	Problems w/Server	2	5	5	7	6	1	4	9	2	3	6	2	0	52
	Problems w/Notebook	4	3	2	5	3	3	5	2	9	2	2	3	3	46
	Problems w/External Hard Drive	3	5	2	7	8	1	3	3	3	3	2	2	1	43
	Problems w/Projector	0	1	0	1	3	4	0	0	0	3	1	2	0	15
	Problems w/CD/DVD ROM	0	0	1	1	0	2	4	2	0	0	2	0	0	12
	Problems w/Tower	0	0	2	0	1	3	0	0	1	2	0	0	0	9
	Problems w/Memory	1	0	2	3	0	0	1	0	0	0	0	0	0	7
	Problems w/Network Card	0	0	1	0	0	1	1	0	2	1	0	0	0	6
	Problems w/Portable Projector S	2	0	1	0	0	1	0	1	0	0	1	0	0	6
	Problems w/TV	0	1	1	0	0	0	1	0	0	1	0	0	1	5
	Problems w/Wireless Card	0	0	2	1	0	1	1	0	0	0	0	0	0	5
	Problems w/Security Cable	0	0	0	0	0	0	1	0	1	2	0	0	0	4
	Problems w/Keyboard	0	1	1	0	0	0	0	0	0	0	1	0	0	3
	Problems w/External DVD Player	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	Problems w/Monitor	0	0	0	0	0	0	1	0	1	0	0	0	0	2
	Problems w/Motherboard	0	0	0	0	0	0	0	0	0	1	0	1	0	2
	Problems w/Mouse	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Problems w/Notebook Powering	0	0	0	0	0	0	0	0	0	0	0	1	0	1

		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Hardware	Problems w/Standalone Scanner	0	0	0	0	0	1	0	0	0	0	0	0	0	1
	Questions w/Notebook	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Fax	Total	0	2	1	2	1	0	0	0	1	1	2	0	0	10
Machine	Problems w/Receiving	0	1	0	1	1	0	0	0	1	1	0	0	0	5
	Problems w/Sending	0	1	1	0	0	0	0	0	0	0	2	0	0	4
	Questions w/Receiving	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Standalone	Total	0	0	0	0	0	1	0	0	0	2	0	0	1	4
Printer	Problems w/Belt	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	Problems w/Error Message	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	Problems w/Roller	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	Unable to Print	0	0	0	0	0	1	0	0	0	0	0	0	0	1

Historical Process Attachment Y

Historically the following activities and processes have been performed across the GAO Infrastructure Operations requirements. They have been used to ensure the current and planned technology matches the evolving demands of the GAO business in the most cost-effective, most efficient, and effective manner. This attachment will be utilized as part of the evaluation process to ensure proposals meet the current and planned demands for IT support.

DESIGN AND INTEGRATION SUPPORT ACTIVITIES

INTEGRATION ACTIVITIES

a. Technology and Procedural Reviews

The contractor ensures that standard operating procedures are effectively documented to support the operational activities across all operational requirements. To accomplish this effort, historically the contractor:

- 1. Maintains an inventory of all standard operating procedures.
- 2. Establishes an SOP (SOP) for any operational activity that currently does not have documented procedures.
- 3. At least annually reviews and updates all SOPs to ensure currency of actions and validate level of detail required.
- 4. Maintains an inventory of all technology configurations and security hardening guidelines.
- 5. Establishes a configuration/hardening document for all current technologies in use and when new technologies are planned for implementation.
- 6. At least annually, reviews and updates configuration/hardening documentation to ensure currency and validate level of detail.
- 7. Maintains an inventory of current technology versions and track vendor updates.
- 8. Establishes maintenance schedules to support review and upgrade planning of implemented technologies.
- 9. Coordinates with GAO technical counterparts to schedule and document the change required to maintain the current GAO technologies.
- b. Change Management (support SCR process) The contractor adheres to GAO change management and configuration management processes and ensure that information is kept up-to-date following changes implemented by new releases and that the content of those releases are managed.
 - a. The contractor ensures that all activities associated with release and deployment support services are approved by the Government prior to movement from the deployment and quality assurance environments to the production and continuity environments.
 - b. The contractor reviews all System Change Requests (SCR) for completeness in detail to include (reason for change, impact to the infrastructure, risks determination, procedure, test plan and back-out plan).
 - a) The contractor ensures data accuracy, configurations are updated, and access controls are appropriate in coordination with GAO Information Security Management.

- b) The contractor coordinates changes to rules, policies, or access to all technologies. Approvals of changes reside with GAO.
- c) The contractor maintains our configuration standards documentation for operating systems, applications and hardening guidance.
- c. The contractor provides the necessary review and collaboration / technical discussion with Government subject matter counterparts supporting the CAB, prior to the CAB meeting. Approvals are obtained through the formal change and release management processes.

c. Project Management (support CRRB process)

- 1. The contractor provides advanced operational SME presence at the Transition Readiness Board and Operational Readiness Board meetings.
- 2. The contractor provides the necessary advanced operational SME support to implement projects and upgrades for the GAO Network Infrastructure.
 - a. Major changes to the GAO Network will be introduced at the Transition Readiness Board. The contractor supports transition processes QA testing, documentation preparation, SOP modification, etc... as planned, post project approval at the Transition Readiness Board meeting.
 - b. Major changes to the GAO Network will become the responsibility of the contractor at the Operational Readiness Review Board meetings, post approval by GAO.

d. Capacity Management

The activities associated with this service area are associated with ensuring that the capacity of the GAO infrastructure (voice, video and data) matches the evolving demands of GAO business in the most cost-effective and timely manner. The activity encompasses the following:

- 1. Monitoring of performance and throughput of IT Services and supporting IT components
- 2. Understanding current demands and forecasting for future requirements
- 3. Developing capacity plans which will meet demand and service levels
- 4. Developing modeling and conducting simulations to manage capacity
- 5. Conducting risk assessment of capacity recommendations
- 6. Developing and implementing a capacity plan
- 7. Tracking licensing requirements for hardware/software/services and recommend capacity changes appropriate to the type of licensing and in support of GAO's budgeting process.

Historically, the contractor provides in support in the following service areas:

- 1. Develop, document and maintain in the Capacity Management procedures that meet requirements and adhere to defined policies.
- 2. Establish a comprehensive Capacity Management planning process
- 3. Define, develop and implement tools that allow for the effective capacity monitoring/trending of IT infrastructure, applications and IT components

- 4. Develop a yearly capacity plan, including quarterly updates
- 5. Develop and implement capacity models and run simulations to validate the capacity plan
- 6. Assess capacity impacts when adding, removing or modifying applications and infrastructure components
- 7. Continually monitor IT resource usage to enable proactive identification of capacity and performance issues
- 8. Capture trending information and forecast future ISTS capacity requirements based on ISTS-defined thresholds
- 9. Assess Incidents/Problems related to capacity and provide recommendations for resolution
- 10. Recommend changes to capacity to improve service performance
- 11. Assess impact/risk and cost of capacity changes
- 12. Maintain capacity levels to optimize use of existing IT resources and minimize ISTS costs to deliver Services at agreed-to service levels
- 13. Ensure adequate capacity exists within the IT environment to meet SLR requirements taking into account daily, weekly and seasonal variations in capacity demands
- 14. Provide quarterly reports on the licensing status of all technologies.

e. Performance Management

The processes associated with this service area are associated with Performance Management Services are the activities associated with managing and tuning Service components for optimal performance. The process encompasses the following:

- 1. Monitoring of performance and throughput of IT Services and supporting IT components
- 2. Assessing the results of the reports
- 3. Conducting trending analysis
- 4. Providing recommendations to tuning network related components or services

Below is a list of the functions the contractor performs in support of Performance Management:

- 1. Develop, document and maintain in the Performance Management procedures that meet requirements and adhere to defined policies
- 2. Perform component tuning to maintain optimum performance in accordance with Change Management procedures
- 3. Manage component resources (e.g., devices and traffic) to meet defined Availability and performance service levels
- 4. Provide regular monitoring and reporting of component performance, utilization and efficiency
- 5. Proactively evaluate, identify and recommend configurations or changes to configurations that will enhance performance
- 6. Conducting trending analysis to recommend changes to improve the performance
- 7. Develop and deliver improvement plans as required to meet SLRs
- 8. Provide technical advice and support to the application maintenance and development staffs as required

f. Problem Management/Troubleshooting and Resolution Management

Problem Management Services are intended to minimize the adverse impact of Incidents and Problems on the business caused by errors within the IT Infrastructure and to prevent recurrence of Incidents related to these errors by determining the unknown underlying cause (e.g., root cause) of one or more Incidents and ensuring that actions are initiated to improve or correct the situation.

Problem Management services includes all identified Problems that are determined to be related to IT systems and services under the control of the GAO, Problem Management also includes:

- a. Coordination and assistance to ISTS and third-party providers (service vendors, hardware manufacturers, and/or software companies) in performing their Problem Management process.
- b. Proper Problem Management ensures that resolutions to problems are implemented through the appropriate control procedures, especially Change Management and the GAO Service Transition process, as well as coordinating Problem Management activities with the various teams within the contractor team, ISTS and third-party providers responsible for performing Configuration Management, Capacity Management, and Continuity Management

Reactive Problem Management services include diagnosing and solving Problems in response to one or more Incidents that have been reported through Incident Management and provide proactive Problem Management to identify and solve Problems and known errors before Incidents occur in the first place, including performing predictive analysis activities, where practical, to identify potential future problems, develop recommended mitigation plans, and implement approved corrective mitigation actions and processes. Problem Management also includes maintaining, updating and disseminating information about Problems and the appropriate workarounds and resolutions, so that the number and impact of Incidents occurring within GAOs IT infrastructure is reduced over time.

- 1. The major activities of Problem Management are:
 - A. Problem Control
 - B. Error Control
 - C. Proactive prevention of Problems
 - D. Performing major Problem reviews
 - E. Providing Problem Management reporting
- 2. Functions the contractor performs in support of Problem Management:
 - A. Participate in developing Problem Management requirements and policies
 - B. Develop process and procedures and methodologies that support ISTS-approved Problem Management requirements and policies that comply with ISTS requirements
 - C. Implement process and procedures and methodologies that support RTIB-approved Problem Management requirements and policies that comply with ISTS requirements

D. Establish and maintain a Problem Management knowledgebase that is accessible to ISTS where information about Problems, Root Cause, Known Errors, Workarounds and problem resolution actions are recorded and tracked. This knowledgebase can be the same knowledgebase as used by Incident Management

g. Continuity Management

IT Disaster Recovery and Continuity of Services are the activities associated with providing IT Service Continuity and DR Services for GAO applications, and their associated infrastructure (e.g., CPU, servers, Network, data and output devices, End-User devices). GAO applications and associated infrastructure will receive DR Services according to GAO's Business Continuity Plan. Below is a list of the functions the contractor performs in support of Disaster Recovery and Continuity.

- 1. The contractor participates when required in GAO Disaster Recovery operational tasks. Maintain and document disaster recovery procedures.
- 2. Recommend best practices for IT Service Continuity and Disaster Recovery Services strategies, policies, process and procedures
- 3. Document IT Service Continuity and Disaster Recovery Services process and procedures that adhere to ISTS requirements and policies
- 4. As needed, assist ISTS in other IT continuity and emergency management activities
- 5. Support the development and maintenance of a detailed DR plan to meet IT Service Continuity and Disaster Recovery requirements. DR Plan includes plans for data, replication, backups, storage management and contingency operations that provide for recovering GAO's systems within established recovery requirement time frames after a disaster affects GAO's use of the Services
- 6. Establish processes to ensure DR plans are kept up to date and reflect changes in the GAO environment
- 7. Establish procedures to ensure the impact to the DR plans are reviewed by the Change Management process.
- 8. Perform scheduled DR tests per ISTS policies
- 9. Coordinate involvement of all other parties for DR testing
- 10. Track and report DR test results to ISTS
- 11. Develop action plan to address DR testing results
- 12. Implement action plan and provide ongoing status until completion
- 13. Coordinate with ISTS during a DR situation per DR policies and procedures
- 14. Provide ISTS access to IT Service Continuity and DR reporting and monitoring systems and data
- h. Availability Management: The contractor tracks and trends chronic outages, service disruptions, and external SLAs.

SECURITY INTEGRATION

a. Assess with appropriate GAO management to ensure the remediation of weaknesses, the elimination of threats, and the reduction of risk to the GAO Network

- b. Provide the design and documentation of effective hardening guidance based upon operating systems, applications, and technologies implemented. The contractor coordinates the details of the hardening configurations with GAO Information Security Management.
- c. Validate the implementation of technical, operation, and management controls across GAO information systems and the network providing recommendations on changes that improve GAO's information security posture and mitigate risk to the GAO network.
- d. The contractor provides design and engineering services that fully satisfy GAO's information security requirements. Design and engineering services include, but are not limited to, the proactive review and expertise of emerging security technologies, methods, and practices so as to improve the GAO IT security posture.
- e. The contractor provides IA support for the design and development of the GAO security architecture that support hardware, software, and networks across the GAO enterprise.

OPERATION SUPPORT PROCESSES

Each of the following detailed Operational Support Processes applies to all of the previously described Operations Support Service areas

MONITORING

The contractor focuses the NOC on monitoring Events and Incident Management. The NOC supports other functions such as Problem Management, Access Management, Configuration Management and Change Management as documented in SOPs.

The contractor focuses the SOC on Security Incident Management. The SOC supports other functions such as Problem Management, Access Management, Configuration Management and Change Management as documented in SOPs.

The contractor manages and operates the NOC and SOC, and maintain end-to-end services that are proactive, responsive, results-oriented, measurable, and consistent in performance and quality, and comprehensive across GAO. Many of the network services are provided by third-party service providers, e.g., Internet and wide and metropolitan area network services, and under these circumstances, the contractor is GAO's liaison to the applicable service provider and ensure the goals and objectives stated above are achieved.

The contractor is using current security tools to perform proactive monitoring of network access points and traffic and all services end-to-end as well as changes to device configurations. The contractor tracks all network anomalies and escalation actions. A Network Anomaly Tracking System (ELog) is maintained and transferred to security for analysis and incident response purposes.

MAINTENANCE MANAGEMENT

The contractor maintains GAO's technical infrastructure through patch management, security vulnerability remediation, and performance of system upgrades on all Logistics, Operating Systems, Client Applications, and Application Services.

Historically, the contractor:

- a. Documents all Maintenance procedures in SOPs
- b. Executes plans from Engineering Support
- c. Support and maintain existing practices, polices, procedures
- d. Executes remediation tasks
- e. Communicates remediation status
- f. Agrees on best course of action until fix is available and agree on plan to implement fix when available
- g. Distributes, tracks, and controls all software changes through the release and distribution management processes and procedures.

PATCH MANAGEMENT

GAO uses Zenworks for desktops, Microsoft's WSUS, and RedHat Linux distribution packages to deliver operating system and application based patches and upgrades to the production environment. Under the release and deployment management services the contractor:

- a. Develops software release and distribution plans and schedules
- b. Develops build and distribution packages
- c. Ensures GAO applications are maintained within two releases of current product offerings.
- d. Ensures timely distribution of security and application patches to the operational environment.

The contractor provides patch management support services for the Novell, Microsoft, and Linux operating system environments. The services ensures that newly released patches or upgrades to servers and desktops are distributed and installed as part of the release and deployment management processes and procedures. Currently, these tasks are performed through the use of Microsoft WSUS, Zenworks for Desktops, and Zenworks Linux Management. The contractor provides the following patch management services:

- a. Document research and configuration baselines for all patches and version upgrades
- b. Associated integration testing processes, procedures, and documented results
- c. Patch deployment/rollout schedules and results.

SECURITY VULNERABILITY REMEDIATION

Vulnerability and Risk Assessment services are the activities associated with vulnerability scanning, penetration testing, security assessment and overall risk assessment to identify and remediate threats that could be exploited to compromise systems. The contractor performs Security Vulnerability and Remediation services according to established SOPs. The contractor performs the following:

a. Conduct vulnerability assessment scans and support testing

- b. Develop remediation plans in response to independent vulnerability and penetration testing findings
- c. Apply fixes in accordance with remediation plans
- d. Maintain up-to-date asset vulnerability inventories
- e. Gather, consolidate and validate threat discoveries and announcements, per SLA definitions
- f. Evaluate and recommend vulnerability remediation tasking for each validated threat exposure

PERFORMANCE OF SYSTEM UPGRADES

The contractor recommends system upgrades as appropriate to supporting the environment. Refer to the SLAs for expectations around keeping the support current.

INCIDENT MANAGEMENT (NOC)

The contractor:

- a. Monitors all Logistics, Operating Systems, Client Applications, and Application Services.
- b. Monitors, reports on, escalates, and notifies GAO regarding incidents.
- c. Manages all incidents.
- d. Opens an ITSM ticket for every incident.
- e. Maintains a Known Errors Database (KEDB) (currently in ITSM).
- f. Refers to the KEDB for incident resolution options.
- g. Escalates to Operations Support contractors if the KEDB does not resolve the incident.

MONITORING (NOC)

The contractor:

- a. Uses current management tool (Solarwinds) to perform proactive monitoring of all Logistics, Operating Systems, Client Applications, and Application Services.
- b. Responds to events and track all incidents.
- c. Generates a system trouble ticket (ITSM Ticket) for follow-up and troubleshooting purposes.

REPORTING (NOC)

The contractor:

- a. Provides problem status documentation
- b. Provides ticket status reports
- c. Produces a checklist for daily status reports covering a brief summary of daily events, to include major outages, any issues specific to the Field Offices, and HQ, according to the SOP
- d. Emails a reference to this daily checklist to non-core contractors.

ESCALATION (NOC)

The contractor:

- a. Refers network problems to other resources in accordance with the escalation process defined in the 911 incident SOP.
- b. Coordinates escalation through the ITSM ticketing assignments.

SECURITY INFORMATION AND EVENT ANALYSIS SERVICE

The contractor:

- a. Implements a 24x7x365 monitoring threat assessment process using Government Furnished Property, to ensure that security attacks and breaches against the GAO IT infrastructure are detected in a timely fashion and the impact of such attacks and breaches is minimized.
- b. Provides analysis of events, alerts, network traffic; create trend reports and security application reports. The contractor uses the above analysis and reports to provide recommendations on changes to system security configurations, network risk mitigation, and network architecture integrity, improving the security posture of the GAO Network and improve the capability for GAO to accomplish their mission.
- c. Monitors the perimeter, network, and endpoint environment from unauthorized access, breach, data loss, or service unavailability due to virus, malware, or denial of service activity
 - 1. Provides an alert system that notifies GAO Information Security Management of impending threats, weaknesses, and risks to the GAO Network and computing environment.
 - 2. Implements a vulnerability assessment process to ensure that GAO IT infrastructure vulnerabilities are identified and are eliminated in a timely manner.

PERIMETER, NETWORK, AND ENDPOINT MONITORING

The contractor provides the management, monitoring, and maintenance of vulnerability scanning of network devices, servers and workstations in collaboration with the Network Operations Group. The contractor provides, at minimum, the following support:

- a. Management, monitoring and maintenance for network-based and host-based intrusion detection systems (IDS).
 - 1. The contractor ensures that appropriate events go from the IDS feed to the GAO Event Correlation Engine.
 - 2. The contractor provides baseline analysis of traffic traversing the perimeter and within the GAO Network.
 - 3. The contractor implements an alerting system on suspicious activities that potentially threaten the GAO Network.
- b. Provide management, monitoring and reporting on perimeter and network firewalls to include but not limited to contracted firewall services, remote access and network segmentation firewalls.
 - 1. The contractor validates the configurations, access controls, and security rules comply with "least privileged" configurations and appropriate access controls to operationally limit access to GAO information systems and data.

- 2. Manages policies, monitor usage, and coordinate the maintenance of the internal network firewalls that provide separation and access control to GAO's network segments.
- 3. Validates the configurations and security rules for GAO's managed firewalls supporting internet access to GAO. Act as GAO's liaison to GAO's Managed Firewall Service provider and ensure the goals and objectives associated with security services area are achieved.
- 4. Manages policies, monitor usage, and coordinate the maintenance of the VPN firewalls that provide separation and access control to GAO's business partners
- c. Provide web (Internet) monitoring to include a comprehensive monitoring program that supports traffic monitoring (Websense), policy restrictions and proxy (Bluecoat SG), and virus remediation of web-based traffic (Bluecoat AV). In addition, the contractor monitors and scans GAO customer (e.g. end-user) activity using the internet.
- d. Implement a comprehensive Anti-Virus and Anti-Malware program for servers, endpoints, and network devices.
 - 1. The program includes virus protection on inbound and outbound email (TrendMicro Interscan), servers (TrendMicro Serverscan and Symantec Endpoint), and workstations (TrendMicro Officescan, Symantec Endpoint) through a variety of GFP tools.
 - 2. The contractor provides a comprehensive spyware protection program on workstations (Symantec Endpoint).
- e. Provide management, monitoring, and maintenance of a data encryption program that includes but is not limited to support for full-disk encryption (McAfee Encryption) on workstations. Ensure the encryption process provides the necessary support for two-factor authentication, screen saver, and media encryption support.
- f. Establish a process to routinely scan (McAfee Vulnerability Manager) all devices, servers, workstations that use the GAO Network in coordination with the Network Operations Group.
- g. Provide the management, monitoring and maintenance of a web application scanner to ensure that the basic OWSAP web application development requirements are assessed.
- h. Provide the management, monitoring, and maintenance of an integrated Event Correlation program, collecting logs and events from network devices, servers, workstations, and applications necessary to process an effective event correlation using centralized log management and security information and event management technologies (NetForensics SIM-One, IP Audit).
- i. Establish a routine reporting process to provide the status of the program and limits of effective protection. To include, but not limited to the following:
 - 1. Provide current and historical scanning, remediation, and threats to the GAO Network.
 - 2. Provide periodic reports on the status of the firewalls configuration and policy/rules reviews will be provided to GAO Information Security.

j. Maintain vigilance and keep abreast of emerging security technologies, methods, and practices so as to improve the GAO IT security posture

SECURITY INCIDENT RESPONSE (REFERRING TO THE SOC)

The contractor:

- a. Maintains an incident response process based on the GAO SOP to ensure GAO is able to respond effectively to an evolving threat environment and ensure the appropriate maintenance of security requirements over the life-cycle of networks under GAO control.
 - 1. Implements a computer system incident response process to effectively respond to the diverse threats, risks, and weaknesses that can compromise the GAO mission.
 - 2. Provides an alert process that notifies GAO Information Security Management of impending threats, weaknesses, and risks to the GAO Network and computing environment. The alert process includes incident response processes to effectively respond to the diverse threats, risks, and weaknesses that can compromise the GAO mission.
 - 3. Employs forensics capabilities to accurately detect, validate, track, and provide appropriate recommendations to weaknesses in GAO's security posture.
 - 4. Establishes appropriate security analysis protocols to determine the risk of threats and events against the GAO infrastructure.
 - 5. Establishes effective processes and procedures to the containment, eradication, and recovery of information systems that are adversely affected by a security related event
 - 6. Follows the SLA for reporting to GAO Information Security Management about network anomalies, confirmed threats, and recommendations on remediation. The contractor implements an incident response process to effectively respond to the diverse threats, risks, and weaknesses that can compromise the GAO mission. The incident response follows the SLA on reporting to GAO Information Security Management about network anomalies, confirmed threats, and recommendations on remediation.
 - 7. Establishes a post incident review process to ensure that remediation is effective, staff is aware of proper procedures, and that changes to future threats are identified to GAO Security Management.
- b. Implements an Information Security report on a monthly basis that details trend reports and security application reports based upon analysis of current security tools and network threats. This report is coordinated through the Manager for the Security Operations Center.

IDENTITY AND ACCESS MANAGEMENT

Identity and access management processes consist of the activities to authorize, authenticate, and provide access control to the IT infrastructure. Identity management within the scope of this TOR is limited to internal access control. The contractor performs the following functions:

a. Provides Identity and Access Management in conformance with ISTS practices, policies and procedures

- b. Establishes roles, authorized activities, and minimum rights granted to Service Provider personnel (including non-user accounts)
- c. Establishes and manage the process for defining, granting, modifying and revoking user accounts and enforcing role restrictions
- d. Establishes and manage process to support temporary access
- e. Supports and maintains IT Identity and Access Management technology solution for infrastructure
- f. Performs Third Level support/engineering, configuration and ongoing management of IT Identity and Access Management technology solution
- g. Provides and implements a solution to interface ISTS and service providers Identity and Access management processes.
- h. Logs and archives user/account activity according to approved logging and archiving
- i. Periodically audits production system access logs and activities to identify malicious or abnormal behavior in accordance with established ISTS policies and standards
- j. Periodically reviews all privileged user accounts to ensure the accounts are valid/required, removing inactive and unneeded accounts in accordance with established ISTS policies and standards
- k. Periodically reviews end user accounts to ensure each user has appropriate minimal permissions required to perform their job function in accordance with established ISTS policies and standards
- 1. Periodically reviews privileged user accounts to ensure each user has appropriate minimal permissions required to perform their job function in accordance with established ISTS policies and standards

DEPLOYMENT MANAGEMENT

Once a requested change is approved by and scheduled by the Government point of contact, the contractor performs release implementation and migration. This function is considered an integral part of release management within GAO and it consists of the tasks and activities performed in developing the business case and implementing technologies that will affect data center operations and infrastructure. This service area also encompasses implementation and migration of new hardware or software as well as upgrading existing facilities. Examples of this function include OS or software upgrades to network servers, firmware updates on network appliances, or configuration changes for any of GAO's supported network server environments. At a minimum the contractor provides the following release implementation and migration support functions:

- a. Define the needed and available resources
- b. Research and document implementation issues
- c. Perform integration tasks
- d. Test the integration of the technology
- e. Perform technology insertions and enhancements
- f. Plan and manage the roll out of software and related hardware
- g. Ensure consistent, accurate, and traceable distribution of packages

CHANGE AND CONFIGURATION MANAGEMENT

Change and Configuration Management coordinates a centralized Change Management Process (CMP) across GAO's IT organization that provides controls over the modification of information system components and related documentation to ensure that only authorized systems and related program modifications are implemented. The ITSM Change Management module is the technology that will be used to centralize the CMP function to facilitate the management of system information and system changes on GAO IT's infrastructure. This module will enable ISTS to automate the control, communication, and documentation of operational and project-related change requests.

The contractor uses the ITSM Change Management module as a tool to provide support for change/configuration management functions such as: request tracking and notification, repository management, and metrics reporting.

INTEGRATED QUALITY CONTROL SUPPORT

The Integrated Quality Control (IQC) process is the process ISTS uses to ensure a high level of quality exists in all software and other IT products before they are deployed. GAO collects data on and maintains information about all forms of testing and quality control from the beginning of an effort through deployment. The contractor provides the following Integrated Quality Control support at a minimum as the IQC coordinator.

- a. The contractor collects data on, track, and report on all forms of software testing across all of ISTS. This will include quality control, regression testing, usability testing, security, load, and integration testing.
- b. The contractor ensures adherence to the Integrated Quality Control process through coordination with all relevant levels GAO management and all relevant contractor personnel including GAO IT security personnel.
- c. The contractor develops, manages, and maintains documentation of the IQC processes and makes the available to GAO.
- d. The contractor develops and maintains process maps that integrate all forms of testing, their reporting requirements, and timing.
- e. The contractor tracks and integrates the use of testing tools and advise GAO about their ease of use and efficiency.

Information Systems & Technology Services (ISTS) Standard Operating Procedure ISTS-LHM-2 Managing In-Stock IT Assets

(Effective Date: 3/31/09)

2.0 Purpose.

This document describes procedures for ISTS staff to manage in-stock IT assets and the movement of those assets between facilities.

2.1 Background.

ISTS Logistics and Hardware Management (LHM) staff are responsible for managing IT assets held in stock. Typically, IT assets are held in stock because they (1) are expected to be provisioned to users long term as needed, (2) serve as loaner pool items, or (3) are being readied to be sent out to a vendor for warranty work, to a GAO Field site, or for excess from GAO HQ. In-stock items may range from capitalized assets (e.g., notebooks) to non-accountable assets (e.g., keyboards, mice and most monitors); and capitalized software.

2.2 Facilities for Assets Required for Daily Operations.

2.2.1 Hardware Support Counter (HSC) is used to store daily operational stock items that are being readied for provisioning to users. Only ISTS/LHM staff have access to this location. Staff access must be approved by the federal LHM Manager.

Asset Movement to/from HSC. When an asset is moved from its location, physical custody must be recorded in Asset Manager at the time of the transaction. The History tab of the item's Asset Manager record will be used to note who has custody of the asset and the reason it is being moved. These items include but are not limited to notebooks, AV equipment, and loaner pool items.

■ Temporary. Help Desk staff must often establish and test user accounts on personal computers (PCs, which can be either notebooks or tower workstations) intended for new users. To move a PC from HSC, the Help Desk staff member logs into ITSM and adds a journal entry to the already-existing account creation incident. The LHM staff member at the Hardware Counter notes the ITSM incident number and location/custody transfer in the asset's Asset Manager record at the same time. When the Help Desk staff member has completed work on the PC, they return it to the Hardware Support Counter. An LHM staff member adds another ITSM journal entry and modifies the Asset Manager record indicating that the PC has been returned to HSC.

Permanent. When an asset is moved permanently from the HSC to the intended user, the transfer of physical custody is recorded in Asset Manager. The History tab of the item's Asset Manager record is modified to note who has been given custody of the asset and the reason it is being moved. When the floor support technician takes custody of the item, a journal entry is made in Asset Manager. The end user takes custody of the asset by signing the ITSM incident, the Asset Manager work order, or the Form 78, Personal Custody Receipt and Rules of Behavior, as needed. A Form 78 is always signed by new users. Upon return of the required documentation to the Hardware Support Counter, LHM staff updates and closes the ITSM work order.

2.3 Managing In-Stock Assets Requiring Replacement or Repair Outside of GAO

When it has been determined that an asset needs to be replaced or repaired by shipping it out of GAO under a warranty agreement or other type of maintenance agreement, or when it has been determined that an asset is needed at a GAO Field Site the following procedures are followed:

- Warranty Items. LHM staff notify the vendor by e-mail or via the vendor's website that the covered asset is defective and needs to be returned for repair or replacement. The vendor issues a Return Maintenance Agreement (RMA) notification with a unique RMA identification number and may, in addition, ship a pre-paid, labeled shipping box to GAO to be used in returning the item. The RMA box includes the shipper identification (DHL, Airborne Express, UPS, etc.) and the shipper tracking number, which is used by LHM staff to monitor shipment status. If capable of holding data, the defective device is sanitized in accordance with SOP ISTS-LHM-3, "Media Sanitation Procedures for Non-classified IT Assets." The asset is then packaged and sealed in the RMA box and delivered to the Knowledge Services' Mail Center for pickup by the shipper. The Asset Manager record is modified to show that the asset is being shipped and the date on which it was given to the Mail Center. An Asset Manager Work Order is also created. In addition, LHM staff complete the GAO Form 678, identifying by name the LHM requester and including the Assets Shipment Accountability Record (ASAR), and the Asset Manager work order number.
- Upon delivery of the package to the Mail Center, LHM staff obtain a signature of acceptance from Mail Center staff on the ASAR. The Mail Center staffer keeps the original and provides a copy to the LHM staffer who brought the package. The Mail Center holds the package in a secure area until the package is picked up by the shipper, who also signs the ASAR. LHM Staff will notify #FO

Property with the package tracking number and all other pertinent information. LHM staff track shipment progress to the vendor with the RMA-associated tracking number to ensure arrival at the vendor's site. After the repaired or replaced asset is returned to GAO, Receiving Unit staff either notify LHM staff that a package is ready to be picked up or deliver the package to LHM staff. In both instances, LHM staff sign for the packages and are given receipts by the Receiving Unit staff. LHM staff make the appropriate entries in Asset Manager and return the item to stock.

- Non-Warranty Items. Assets requiring shipment to GAO Field Sites are shipped via FedEx through the Mail Center. If the asset is of a type capable of holding data, it is first sanitized in accordance with SOP ISTS-LHM-3, Media Sanitation Procedures for Non-classified IT Assets. LHM staff package the asset and deliver it to the Mail Center. The Asset Manager record is modified to show that it is being shipped and the date on which it is given to the Mail Center. An ITSM work order is created. In addition, LHM staff complete an ASAR, identifying by name the Field Office requester and including the ITSM work order number.
- Upon delivery of the package to the Mail Center, LHM staff obtain a signature of acceptance from Mail Center staff on the ASAR. Mail Center staff retain the original and provide a copy to the LHM staffer who brought the package. LHM staff provide to Mail Center staff the information required for the FedEx Airbill. Mail Center staff process the package for delivery using FedEx's web-based shipping utility. Mail Center staff then generate two labels from the FedEx system which contain the FedEx tracking number. One sticker is placed on the package and one sticker is given to LHM. The Mail Center holds the package in a secure area until the package is picked up by the shipper. LHM staff track shipment progress with the tracking number and email the Field Office requestor and #FoProperty with the package tracking number and all other pertinent information.
- **2.4 Managing In-Stock Assets Capable of Holding Data**. GAO maintains IT assets that hold data and, as such, these assets are handled with great care. LHM staff maintain such assets in locations that have a high degree of physical security, regardless of their monetary value. Among these assets are PCs, servers and external hard drives.
 - 2.4.1 HSC: All in-stock assets which hold data, with the exception of those being readied for immediate user provisioning or readied for return to vendor (which are in HSC) are kept in secure storage at the HSC. Notebook bags and accessories are stored elsewhere to ensure that no notebooks are hidden or misplaced inside a bag.

- **2.4.2** Asset Movement to/from HSC. When an asset is moved from the HSC to another location, physical custody is immediately recorded in Asset Manager. The History tab of the item's Asset Manager record is used to note to whom custody has been transferred; and the reason it is being moved.
- **2.4.3 HSC.** Because some items are must be readily accessible due to their high rate of use, they must be kept in operational stock. A small number of PCs are kept at the HSC for this purpose.
- 2.4.5 LHM Storage Area. This is a card reader controlled facility on GAO's basement level. It is the primary repository for in-stock IT assets and is used to process-in most new equipment items and to store large, high-value or sensitive IT assets. These include servers, tower workstations, small printers and a large variety of PC peripherals. Card reader access must be approved by the federal LHM Manager
- 2.4.6 Asset Movement to LHM Storage Area: After incoming assets are processed by FPM, they are moved to the LHM Storage Area. LHM staff receive the equipment and verify barcodes and serial numbers in Asset Manager, noting the asset's new location. If necessary, the asset may be moved to another location; factors such as type of asset, stock levels, and user needs determine where the equipment is moved.
- 2.4.7 Asset Movement from LHM Storage Area. Whenever an asset is moved from this location, physical custody must be recorded in Asset Manager at the time the transaction takes place. The History tab of the item's Asset Manager record is used to note the date/time, who has custody of the asset and the reason it is being moved.

Other facilities than those described below may be used for processing in new equipment upon agreement with FPM, ISTS, and the Office of Security. Major rollouts of large numbers of assets, such as the replacement of notebooks three to four years, is handled by and described in special SOPs

- 2.5 Managing In-Stock Non-Sensitive/Low Value Assets. Low Value Assets such as keyboards, mice, docking stations, cables, speakers and notebook bags are kept secured in the LHM Storage Area.
- 2.6 Managing In-Stock Assets for Excess from GAO HQ. LHM has a secure Storage Area on the sub basement level of the GAO HQ building. This is a floor to ceiling fenced area used only to store items that have already been processed for excess by LHM and are ready for pickup by FPM. Devices capable of holding data may only be stored in these areas if they have already been sanitized in accordance with ISTS-LHM-3. For a

description of the manner in which assets are prepared for excess, see SOP ISTS-LHM-4, Preparing IT Assets for Excess.

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Information Systems & Technology Services (ISTS) Standard Operating Procedure ISTS-LHM-3 Media Sanitization Procedures for Non-Classified IT Assets

(Effective Date: 2/3/13)

3.0 Purpose.

This document describes procedures ISTS/LHM staff use to sanitize electronic data storage devices and media prior to reissuance, transport of such devices to a vendor for warranty work, or excess from GAO inventory.

3.1 Background

LHM is responsible for sanitizing all non-classified electronic data storage devices and media prior to reissuing them to users, sending them to a vendor for warranty work, or excessing them from inventory. Among the devices that must be sanitized are PC hard drives, USB flash drives, and external hard drives. Occasionally, LHM are asked to sanitize consumable media such as CDs and DVDs. All degaussing performed by LHM contractors are observed by the federal LHM Manager.

3.2 Sanitizing GAO IT Assets for Reissue

All devices capable of holding data are sanitized before being reissued.

Sanitizing Notebooks and Towers for Reissue:

- LHM receives the device from the customer and provide a receipt.
- If the asset was on loan to the user, LHM will either reimage the device or remove the data using DOD-approved software to wipe the drive to ensure that the device holds no data.
- If the asset served as a user's primary workstation, LHM stores the device in a secure storage locker for a minimum of five (5) business days to ensure that any data that may be needed has been retrieved.
- Within 1 business day after the 5-day retention period, the PC is reimaged.
 LHM prepares an Asset Manager work order identifying PCs to be reimaged.
 The work order is printed out and placed with the device to be reimaged.
- LHM then reimages the PC and returns them to secure storage. Both the C: and D: drives are reimaged, which overwrites any previous information on the hard drive and returns it to a standard GAO network image condition.
- Newly re-imaged devices are kept in LHM work area.

Sanitizing External Hard Drives and USB Flash Drives for Reissue:

- Receive the device from the customer and provide a receipt.
- Download any data to a CD or DVD so that the customer may keep on working if this is a requirement. LHM does not store such CDs or DVDs unless the user specifically requests it. If such a CD/DVD must be stored

prior to a user being able to pick it up, LHM staff open an ITSM incident to note the date/time of the request, the name of the technician who copied the files onto the disc, and when the customer is expected to pick it up. The CD or DVD is kept in a secure storage locker room. If the disc is not picked up within two (2) business days of the agreed-upon date, the disc is destroyed. The transfer of the disc to the customer (or its destruction) is noted in a journal entry in the ITSM incident and the ticket is closed.

- Use DOD-approved software to wipe the drive to ensure that the device holds no data within one (1) business day.
- Create an Asset Manager work order which records that the "wipe" was completed, noting the date, time, and staff member who conducted the process (external hard drives only.)
- Return the asset to stock.

3.3 Sanitizing Equipment Sent Out of GAO for Repair

Prior to sending a notebook, tower workstation, external hard drive, or other device to a vendor for repair, LHM staff create an Asset Manager work order to track the process. Preferably, a device is sent out to a vendor for repair only after its data storage component (e.g., a hard drive) is removed completely.

When a device must be sent out for repair with its data storage component intact, LHM will:

- Coordinate with Customer Support staff to ensure that the data on the device is uploaded to the network for safekeeping, if necessary.
- Download the data to a new device so that the customer may keep on working.
- Hold the device in a secure storage room for at least five (5) business days to
 ensure that any data that may be needed has been transferred to the new
 device (if the hard drive may still be accessed.)
- Wipe the device using DOD-authorized software to ensure that the device holds no data within one (1) business day of receipt or the completion of the required retention period, as needed.
- Notify #Property via email that asset is being sent out for warranty repair.
 The email includes make and model of asset, GAO barcode, and FedEx Tracking number.
- Send the device to the vendor for repair.

3.4 Sanitizing Assets Prior to Excessing or Donation

In accordance with federal regulation, GAO excesses computer equipment through GSA or donates it to local schools and non-profit organizations. Under these circumstances, GAO requires the use of a DOD-approved wipe program to ensure that the equipment is fully sanitized with no files remaining. Since devices identified for excess have gone through the receipt and sanitation process under one of the categories above, the wipe may be conducted just prior to delivery to

FPM. After the wipe is complete, appropriate staff (LHM in HQ, ISTS staff in the Field) may load an approved operating system on the device upon request of the receiving organization. In HQ, the date, serial number, bar code, make/model, and staff member who conducted the procedure are recorded in an Asset Manager work order. LHM /ISTS Field Office staff then notify FPM that the equipment is ready for disposition according to procedures outlined in SOP ISTS-LHM-4

3.5 Sanitizing Backup Tapes Prior to Disposal

Network backup tapes are destroyed using the degaussing process. ISTS engineers deliver the backup tapes to be destroyed to LHM and are provided with a receipt. Within one (1) business day of receipt of the tapes, LHM processes the tapes through the degausser which is observed by the federal LHM Manager. This action is recorded in an Asset Manager work order. The degaussed tapes are then excessed by FPM.

3.6 Field Office Processes

Field office staff use the same procedures to sanitize assets that may hold data. Whenever the physical custody of an asset in a Field Office changes and data sanitization is required, field office staff send an e-mail to the #FOproperty address to notify HQ staff of the change in status. LHM then update the official record in Asset Manager.

Information Systems & Technology Services (ISTS) Standard Operating Procedure ISTS-LHM-4 Preparing IT Assets for Excess

(Effective Date: 2/3/13)

4.0 Purpose

This document describes procedures LHM staff use to prepare and transfer assets to Facilities & Property Management (FPM) for excessing (disposal or other disposition.)

4.1 Background

In accordance with federal regulation, GAO excesses IT and telecommunication equipment through GSA or donates it to local schools and other qualified institutions. LHM works closely with FPM to dispose of all IT assets that are irreparable or of no further use to GAO. ISTS is responsible for managing the middle part of the asset life cycle. Officially bringing assets into inventory and removing them from inventory are the sole responsibility of FPM.

4.2 Preparing IT and Telecommunication Assets to Be Excessed

- Assets to be excessed may be broken or no longer needed at GAO for some other reason, such as having been superseded by a newer technology, though still operable. LHM continually collects and reviews assets returned for these reasons and turns them over to FPM as conditions and quantities warrant.
- If capable of holding data, the assets must first be sanitized according to procedures identified in ISTS-LHM-3, Media Sanitation Procedures for Nonclassified IT Assets or ISTS-LHM-8, Managing IT Assets Used for Processing Classified Information. Such assets include (but are not limited to) notebooks, tower workstations, external hard drives, and other storage devices. Sanitization is always recorded in the asset's Asset Manager record.
- LHM staff record the sanitization of any data holding device during excess preparation in the asset's Asset Manager record (History Tab). They also change the asset's PPCO code to 12809455 (ISTS Excess) on the day the assets are moved to the sub-basement. LHM also generates the FPM form Authorization to Excess ADP and/or Telecommunications Property that lists all the equipment to be excessed or surplused. Among the details listed in this document are each asset's description, barcode, serial number, condition and reason for excessing.
- For data-capable assets, an additional form must be prepared before they
 can be given to FPM, the <u>ISTS LHM Sanitization Certification Form</u>. This form

specifically identifies the asset and indicates the manner in which it was sanitized.

- LHM will fill out the forms and provide them to the federal LHM Manager for approval and signature. Once the LHM manager is satisfied with the accuracy of the data, he/she signs and dates the forms. The forms are given to FPM manager.
- Once FPM accepts the assets for excess, responsibility for these assets is transferred to FPM. LHM will coordinate with FPM for movement of the equipment from ISTS space to FPM space for disposition.

4.3 Field Office Processes

Under the direct supervision of FPM, IT assets are excessed directly from the field office in accordance with the procedures in FPM/PB-16 – Excessing Property – FO.

Information Systems & Technology Services (ISTS) Standard Operating Procedure ISTS-LHM-5 Provisioning IT Assets to GAO Users

(Effective Date: 2/3/13)

- **5.0 Purpose.** This document describes procedures used by LHM in providing IT assets to GAO users on either a temporary or permanent basis.
- 5.1 Background. LHM and CSS contract staff are responsible for providing IT assets to GAO users. LHM usually provides the assets to the customer-facing CSS staff, who then provide them directly to the users. The chain of custody is tracked in Asset Manager. Assets are primarily assigned to individuals based on their role (analyst, specialist, contractor, etc.) and status (new hire, PDP, transfer to/from field office, etc.). There may also be other specific requirements approved by authorized parties in GAO. These other requirements would include the provision of assets needed to cope with disabilities, to perform special job-related functions, etc.

5.2 Provisioning IT Assets to New Hires, Whether GAO or Contract Staff:

- O Authorization to assign assets. GAO's Human Capital Office (HCO) staff issues official notification to all service providers, including ISTS that a new hire is arriving. This is in the form of a notification from the New Staff Services Assurance (NSSA) tracking system Customer Support Services (CSS) staff create an incident in ITSM to document the requirement for account creation, which includes direction to LHM to issue equipment.
- Basic assets assigned to new staff. New hires are usually assigned a PC, either a notebook or tower; a SecurID token, and other assets may also be assigned depending on the new hire's role. The assignment of other assets may involve negotiation between ISTS and the new user's management.

Having obtained the location of assigned space of the new hire from the NSSA notice, CSS staff visits the location to determine the existence and condition of required assets. The monitor, docking station, keyboard, and mouse are typically available in the customer's new office prior to arrival. If the authorized equipment is not in place or is not in good condition, it is provided or replaced.

Delivery of assets to new staff - Notebooks:

LHM identifies a notebook from in-stock assets to be readied for the new hire. The notebook may already be available at the Hardware Support Counter or may need to be provided from long-term storage. Movement and custody changes are recorded in Asset Manager.

- Notebooks are usually delivered to new hires on their first day at GAO during the biweekly new employee orientation sessions held in the Learning Center.
- In the period before the new hire arrives, LHM will issue CSS staff with a notebook to initiate the user account and setup the RSA SecurID authentication. The issuance occurs at the Hardware Support Counter. At the counter, the CSS staffer logs into ITSM and adds a journal entry to the existing ITSM account creation ticket. The LHM staffer issuing the notebook notes the ITSM incident number in the device's Asset Manager record at the same time. When the CSS staffer returns the notebook to the counter, both the ITSM and Asset Manager records are again modified, by CSS and LHM staff, respectively.
- When the notebook is ready for delivery, LHM prepares a GAO Form 78, which accompanies the notebook when it is delivered to the customer. An ITSM work order is also created and is signed by the CSS staffer. The CSS staffer also adds a new journal entry to the ITSM incident.
- The new hire signs the Form 78 which the CSS staffer returns to the Hardware Counter, typically on the same day.
- LHM scans all Form 78s into DM as searchable pdf files. The original Form 78 is filed away.
- Delivery of assets to new staff Tower Workstations:
 - Tower workstations are typically delivered to new staff in their office rather than during the New Employee Orientation session that takes place in the Learning Center on their first day. LHM identify the assets to be delivered and prepare them for delivery in cooperation with Tier 1 staff. All procedures are identical to those for notebooks except for the place of delivery.
- **Provisioning IT Assets to On-Board GAO or Contract Staff on a Short-Term Basis**. Staff sometimes needs assets on a short-term basis. These are usually, but not always, provided from an LHM-maintained loaner pool.
 - Loaner Pool Assets: Staffs that need assets for short-term use usually submit their requests to CSS staff via telephone (512-9500) or e-mail (HelpMe@gao.gov) Staff in the field who require a loaner assets usually first contact their local ISTS representative. Requests from field offices are usually handled locally unless an asset is unavailable, in which case the request is forwarded to either CSS or LHM in Headquarters.
 - Upon seeing the request, which is transmitted as an ITSM incident, LHM staff checks whether the asset is available and notes the request and ITSM incident number in the History tab of the asset's record in Asset Manager. Loaner assets are typically maintained at the Hardware Support Counter. LHM will prepare an ITSM work

- order; prepare the asset for customer pick up or delivery by CSS staff; and assign the ITSM incident the appropriate CSS unit.
- While the loaner is out, the ITSM incident is kept open. Should it not be returned on the date agreed, the customer is contacted. In some cases, the loan is extended.
- When the asset is returned to the Hardware Support Counter in either the customer or by CSS staff, the return is noted on the paper work order. The work order is signed by either the customer or CSS staffer and the item is returned to stock. The customer or CSS staffer staff is given a copy of the signed work order. The Asset Center record is updated at the time of return and the ITSM incident is closed.
- Non-Loaner Pool Assets. Staff occasionally request items that are not part of the standard loaner pool, for example, a stand-alone printer. In such cases, CSS or LHM will forward the request to Customer Relations Group (CRG) for approval. If no assets are available to meet the request, ISTS staff works with the user and Managing Director to determine whether a procurement action is required.
- 5.4 Provisioning Assets to Existing GAO/Contract Staff on a Permanent Basis. Customers sometimes require a new asset, either because they have a new requirement or because an assigned asset is no longer functioning. If ISTS management authorizes the asset, LHM will coordinate with CSS to ensure delivery of the new asset to the customer. If numerous users are expected to receive a new asset, LHM will coordinate with CSS and other parties as indicated to prepare a rollout process appropriate to the asset type/class and customer requirement. In some cases, a unique SOP is created, such as that created to document to rollout of the HP 6910p notebooks to nearly all GAO staff.
- 5.5 Returning IT Assets to Stock. Assets are returned to stock when a user is leaving the agency, the asset is no longer needed, or the asset is retired for any other reason. FPM is responsible for the Exit Clearance Process and so handles the initial return of IT assets for departing staff and then turns the assets over to LHM. LHM contract staff note the request and ITSM incident number (if any) in the History tab in Asset Manager for the asset to be returned. LHM contract staff ensure the following actions are completed:
 - The customer signs the exit clearance paper work order noting that he has surrendered the asset. The asset and exit clearance paperwork are returned to LHM, who update Asset Manager.
 - Staff will verify all CD-ROM/DVD-ROM Drives are empty upon taking custody of asset.
 - LHM then returns the asset to stock and prepare it for reissue or for excessing, as appropriate. See also SOPs ISTS-LHM-3: Media Sanitation Procedures for Non-classified IT Assets and ISTS-LHM-4, Preparing IT Assets for Excess. For more information.

- Procedures for processing assets returned as the result of a general technology refreshment or mass deployment are identified and documented separately as needed to ensure appropriate internal controls are implemented. A unique SOP may be generated in such instances.
- **5.6 Field Office Processes**. Field office staff does not currently have Asset Manager edit rights. Therefore, when physical custody of an asset in a Field Office is reassigned, ISTS field office staff sends an e-mail to the #FOproperty mail list to notify HQ staff. LHM will update the record in Asset Center.

Information Systems & Technology Services (ISTS) Standard Operating Procedure ISTS-LHM-7 Conducting and Reconciling Quarterly Inventories of Selected In-Stock Assets (Effective Date: 6/20/12)

7.0 Purpose

This document describes procedures for ISTS staff to conduct and reconcile inventories of selected in-stock assets on a quarterly basis, generally within 10 business days each fiscal year quarter. These inventories are conducted and controlled by ISTS. It should be noted that the annual GAO property inventory, which is conducted and controlled by Facilities and Property Management (FPM), is governed by *FPM/PB-7*, *Conducting and Reconciling Annual Personal Property Inventory*. The procedures described in this SOP-LHM-7 are limited to the quarterly inventory of selected in-stock assets conducted by ISTS's Logistics and Hardware Maintenance (LHM) group, part of ISTS's Customer Relations Group (CRG).

7.1 Background

Contract staff are responsible for managing in-stock IT assets under the supervision and direction of the federal LHM manager. IT assets are held in stock for various reasons, including but not limited to the following:

- They are expected to be provisioned to users on a long-term basis
- They are used as loaner pool items
- They are being readied for shipment to vendor for repair/replacement
- They are being prepared for excess

In-stock assets range from accountable assets such as notebooks and servers to non-accountable, non-tracked assets such as keyboards and mice. To ensure that in-stock assets are properly accounted for, LHM conducts quarterly inventories of selected in-stock assets.

7.2 Responsibility for Determining the Scope, Operation and Reconciliation

3(a) Scope of Inventory: The LHM Manager is responsible for selecting the timeframe and assets to be inventoried. High-risk assets--those that are capable of holding data--are always among those inventoried. Other assets may also be inventoried at the discretion of the LHM Manager, in consultation with the CRG Director. The decision to conduct an inventory, the timeframe, and the target

¹ 4th Qtr. – Property Management conducts inventory of all items for external audit.

assets are documented in a memorandum from the LHM Manager to the CRG Director.

- **3(b) Operation of Inventory**: The LHM Manger and/or other ISTS staff generally carry out the inventory. Contract staff may assist, but only under the supervision of federal staff.
- **3(c) Reconciliation of Inventory**. The LHM Manager is responsible for reconciling the results. LHM contract staff may be called upon to supply data upon request to ensure the completion of the reconciliation.

7.3 Inventory Timeframes

The periodic Inventories of in-stock assets are conducted at least quarterly and may take place more often. To the extent consistent with staff resources and orderly operations, inventories are conducted with as little advance notice to LHM contract staff as possible. Reconciliation of inventory findings is done within 10 business days unless the LHM Manager documents why more time is needed.

7.4 Asset Types to Be Inventoried (Target Assets)

The target assets are selected by the LHM Manager, subject to the approval of the CRG Director. High-risk assets--those that are capable of holding data--are always among those inventoried. Other assets may also be inventoried at the discretion of the LHM Manager, in consultation with the CRG Director. Examples of other assets include but are not limited to assets identified for excess but not yet been transferred to FPM for final excess; accountable software; and audio/visual equipment.

7.5 Physical Inventory Process

Once the date of the inventory and asset types to be inventoried have been determined, the ISTS/LHM Manager determines if additional federal staff resources are required and, if necessary, requests such resources from the ISTS/CRG Director.

The following key steps are taken on the day of the inventory:

AssetCenter is searched for the target assets and the resultant data is exported
to an Excel spreadsheet on which the date and time of the AssetCenter search
results are noted. (If there is any uncertainty as to whether the AssetCenter
search has captured all the relevant target assets, the complete set of
AssetCenter items will be exported to Excel for subsequent analysis.) As with all
other inventory documents, this Excel document is saved as a DM document. At
a minimum, the data includes barcodes, serial numbers, model and location.
Other data may be added as appropriate.

- Contract staff are notified of the intention to begin the inventory and told to discontinue both physical movement of target assets and changes to AssetCenter involving the target assets.
- The target assets' barcodes and serial numbers are scanned into an Excel spreadsheet on a notebook working in stand-alone mode with a cable link to a barcode scanning device.
- Upon completion of the scanning, the notebook is reattached to the network and the Excel spreadsheet is saved as a DM document.

7.6 Analysis and Reconciliation of Inventory Results

The analysis and reconciliation of the inventory results is based on a Five-Key-Internal-Control methodology. This methodology is based, in turn, upon recommendations made by GAO various federal agencies. The five controls and their definitions appear in the table below.

Five Key Internal Controls Employed in Quarterly Inventories of Selected In-Stock Assets							
Control	Description of Control						
1. Beginning Inventory from prior quarterly	This is the physical count from the						
count.	previous quarter fiscal year end count.						
2. Additions to Inventory	These are the physical units moved into						
	the inventory as recorded in the inventory						
	records during the period.						
3. Removals from Inventory	These are the physical units removed from						
	inventory as recorded in the inventory						
	records during the period.						
4. Ending Inventory	The balance of the physical units as						
	computed in the inventory records and the						
	physical count of those units at the end of						
	the period. Both amounts are of the same						
	date and time.						
5. Reconciling physical ending inventory to	This means comparing the ending physical						
AssetCenter ending inventory	count to the ending inventory computed in						
	inventory records and resolving any						
	differences.						

The manner in which the quarterly LHM inventories track to the Key Controls in the table above is as follows. Number 4 constitutes the physical inventory conducted on the selected date, described in Section 6, above. This inventory data is compared to the final prior year audit inventory (Number 1), as adjusted by the additions to inventory

(Number 2) and removals from inventory (Number 3) in the intervening period. The reconciliation of data these two data sets constitutes Number 5.

The analysis of the inventory results usually yields data showing assets: (1) not located where expected according to Asset Center, (2) not found as expected, or (3) found to be in stock unexpectedly (i.e., recorded in Asset Center as being in use in another location.)

Upon completion of the analysis, the Manager, ISTS/LHM:

- Notifies LHM contract staff of the results of the analysis
- Requests that incorrect locations be updated within 1 business day, and
- Requests that "not found" items be found immediately (within 5 business days.)

The LHM contract staff then:

- Update incorrect locations of assets in Asset Center as requested in 1 business day.
- As assets are found, update information in Asset Center.
- Notify the Manager, ISTS/LHM of the timeframe when "not found" assets are to be found and updated.

If assets remain unfound after 5 business days, end-of-inventory processes commence in accordance with FPM/PB-7, Conducting and Reconciling Annual Personal Property Inventory.

7.7 Final Reporting Requirement

Upon completion of the inventory, its analysis, and reconciliation, the LHM Manager prepares a final report which is stored in DM and provided to the CRG Director. The final report will typically comprise a single Excel document with DM links to other relevant documents.

-- END OF DOCUMENT --

Information Systems & Technology Services (ISTS) Standard Operating Procedure ISTS-LHM-8 Managing IT Assets Used for Processing Classified Information

(Effective Date: 2/3/13)

- **8.0 Purpose.** This document describes procedures ISTS staff use to manage IT assets used for processing and storing classified information. It does not address security procedures staff must use when working with classified information.
- **8.1 Background.** ISTS's Network Operations Group (NOG) staff, comprising both federal and contractor staff, with support from ISTS Logistics and Hardware Management (LHM) are responsible for ensuring that all IT assets required for processing classified information are identified and tracked to ensure that both the assets and the information stored on them are protected.
- **8.2 Issuing GAO IT Assets for Use in a Classified Environment.** Once an IT asset that can hold data is assigned for use in a classified environment, it cannot be reused in a non-classified environment.

Issuing IT Assets for Classified Work:

- When IT assets are required for classified work, the NOG Security Manager works with the Director of ISTS's Information Systems Security Group (ISSG) to identify the exact requirement. The Manager NOG/Security Manager then informs LHM and requests that equipment be issued, ensuring that the federal LHM Manager is aware of the request. These requests result in the creation of an ITSM ticket.
- Upon receipt of the request, LHM determines whether the equipment is available in the in-stock inventory. If the equipment is not available, the NOG/Security Manager is notified and must request that the equipment be acquired through normal acquisition procedures.
- Once the specific assets are available, LHM work with the Manager to arrange for negotiate delivery. The NOG/Security Manger must arrange for staff with appropriate clearances to be available to assist, if required.
- LHM use processes documented in SOP ISTS-LHM-5: Provisioning IT Assets to GAO Users to record changes in custody with the exception that the asset is not assigned to a specific user in Asset Manager, but rather to the secure facility to which it will be delivered.
- The NOG/Security Manager or designee signs for the asset when it is delivered. If the asset is a notebook that will be loaned to users for classified work, the NOG/Security Manager establish a tab in the secure room's Notebook Issuance Logbook (NIL) for the device under its barcode.
- **8.3 Managing Classified IT Assets.** After delivery to GAO's secure facility used for classified work, changes of custody of assets are recorded outside of

Asset Manager. Upon delivery, tower workstations are installed in the facility as they are not issued for use outside the facility. Notebooks are stored in the facility pending assignment to individuals as needed. A unique image is loaded on both tower workstations and notebooks, to ensure the security of the data.

Issuing classified loaner notebook computers to users. The Manager, NOG/Security Manager or designee is responsible for ensuring that notebooks are prepared and issued according to security requirements. Once the decision is made to issue a notebook for classified work, the NOG/Security Manager or designee:

- Ensures that the device has the appropriate image installed.
- Ensures that the device has appropriate warning label(s) applied.
- Ensures that the customer signs and dates Form 78.
- Stores the Form 78 under the asset's tab in the NIL.
- Updates the list of active classified loaner notebook custodians (see below.)

Accepting return of a classified loaner notebook from a user. When a notebook computer is no longer needed, the user returns it as soon as possible to the security facility from which it was borrowed. The NOG/Security Manager or designee accepts the notebook:

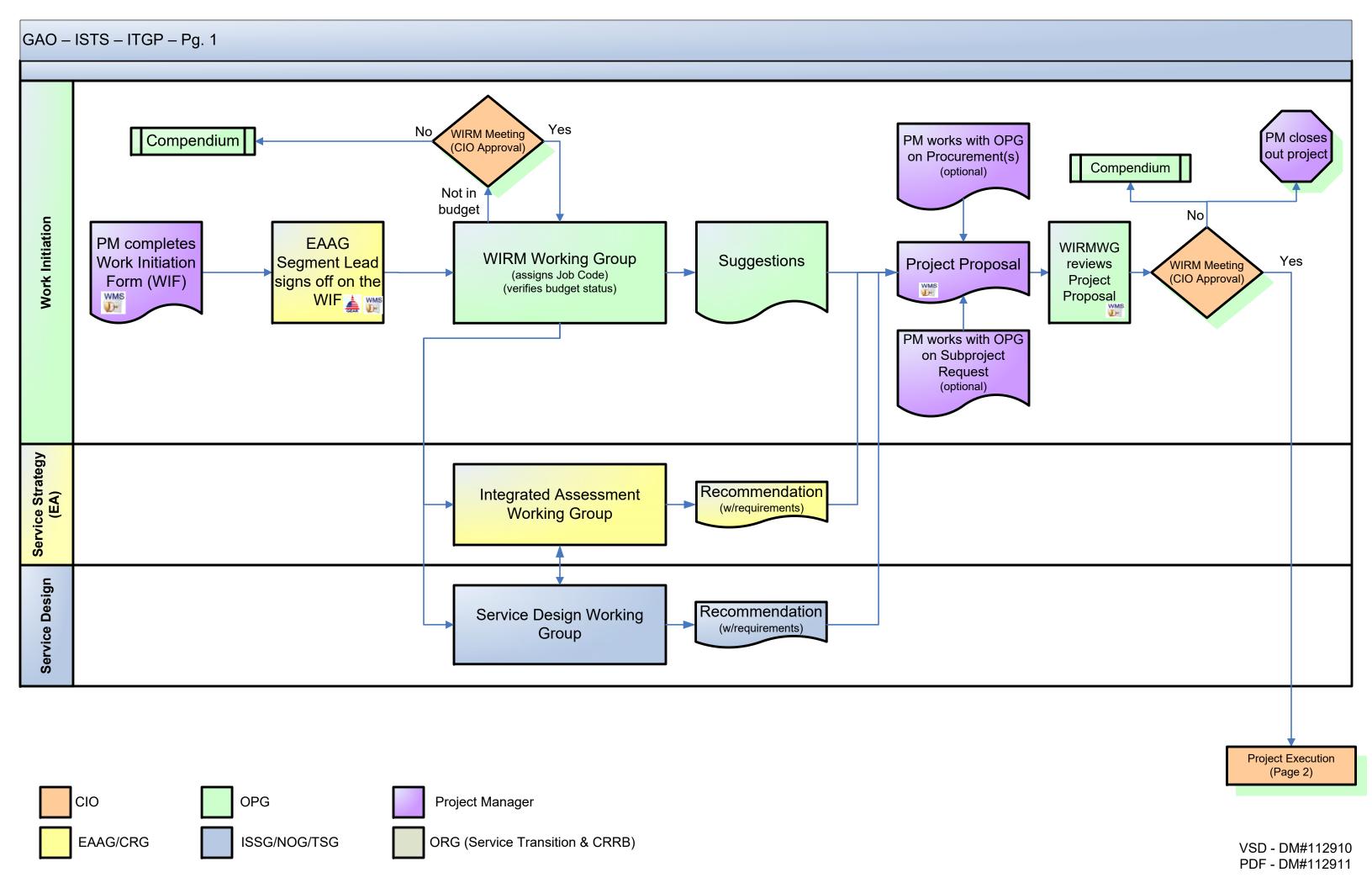
- Retrieves the original signed Form 78 from the Notebook Issuance Logbook, draws a diagonal line across its face, and asks the user returning the device to sign and date across the line. Upon request, the user is given a copy of the signed Form 78.
- Places the signed Form 78 in the NIL to document the chain of custody of the device.
- Updates the list of active classified loaner notebook custodians (see below.)
- Ensure the equipment is wiped, in accordance with section 8.4, prior to releasing equipment to staff who do not have an appropriate clearance.

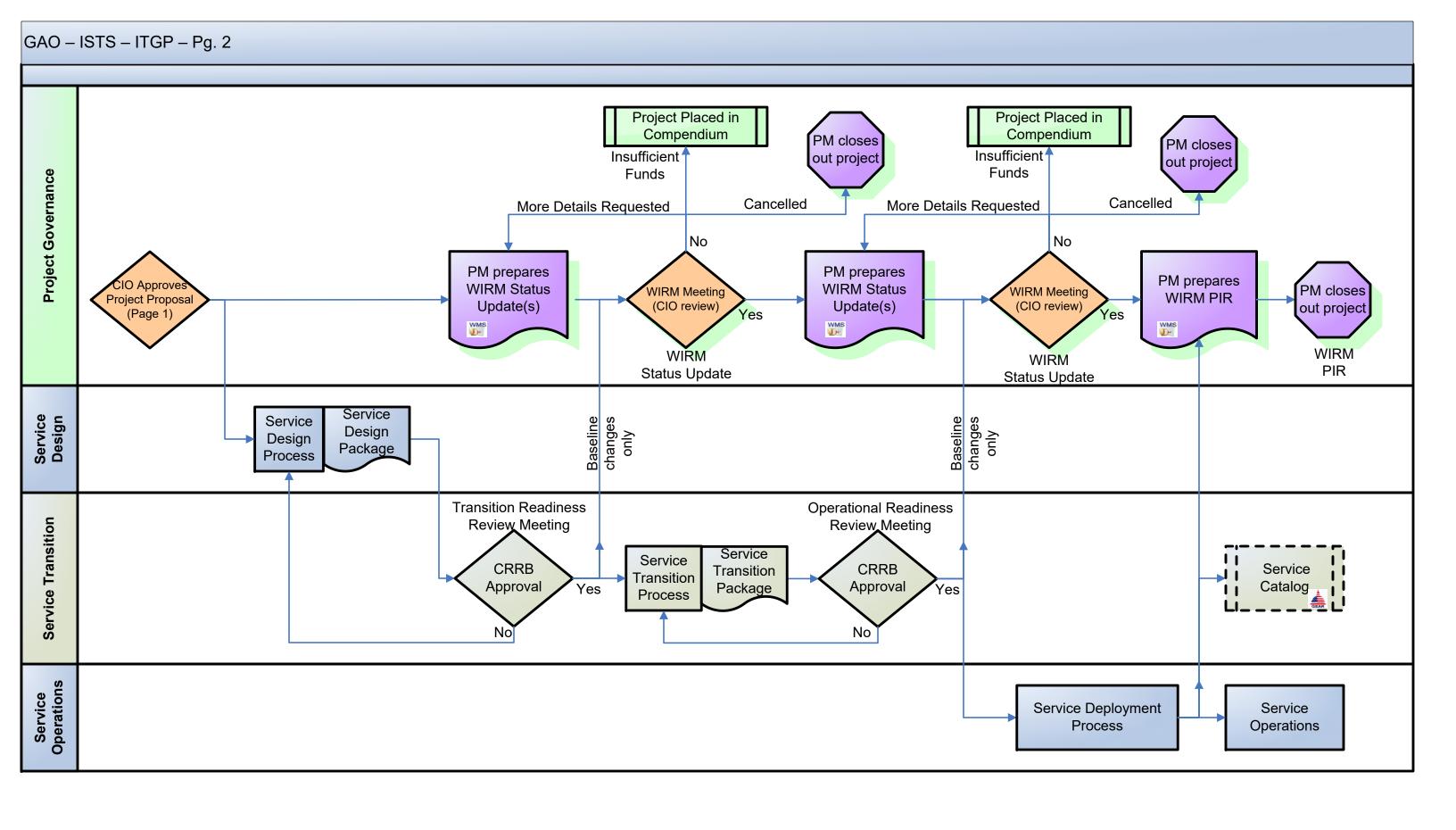
Maintaining a list of active classified loaner notebook custodians. The NOG/Security Manager or designee is responsible for maintaining a list of active custodians of classified notebooks/barcodes. This list is stored in DM and immediately updated whenever a classified notebook is issued or returned. The list is intended to give CASO/FPM a ready resource they can use as part of the GAO exit clearance process. The availability of such a list ensures that staff is held accountable for transferring custody of classified loaner notebooks prior to departing the agency. DM access is granted by the NOG/Security Manager to the following staff:

- Manager, ISTS/NOG/Security
- Director, ISTS/ISSG
- Manager, ISTS/LHM
- Designated CASO/FPM managers/staff.

- 8.4 Sanitizing Classified Computers/Data Storage Devices Prior to Reissue. NOG contract staff/classified admin that posses a clearance at the Secret level (or higher) use a DOD-approved "wipe" program to ensure that the equipment is fully cleaned and that a degauzer is used, when needed, to permanently destroy equipment used in the classified environment prior to excessing. In cases where Top Secret material is stored on the device, NOG contract staff consult the Director of ISSG to ensure that proper measures are taken to sanitize and dispose any top secret devices/information. NOG contract staff does not handle Top Secret data/devices, but rather coordinate with the NOG Security/Manager and Group and Office of Security and Safety staff to ensure that the wipe process takes place. NOG contract staff coordinates to conduct the "wipe" with two additional witnesses who possess Top Secret clearances to verify the destruction of the information/media. LHM do not handle Top Secret data/devices, but rather coordinate with the NOG Security/Manager and Group and Office of Security and Safety to ensure that the wipe process takes place. Hard drives (removable or external) are handled using an identical approach. The process used is described in the Asset Manager work order.
- 8.5 Sanitizing Classified Data Storage Devices Prior to Excessing. GAO stores classified data on a variety of media such as computer hard drives, external hard drives, thumb drives, CDs, and DVDs. GAO also mandates that photocopying of classified data be done on devices with a removable hard drive. Before being excessed, all such storage media and devices must be destroyed in accordance with the GAO Security Manual, Directive 0910.1-02: Information Security Requirements for Classified Information to ensure that no files may be retrieved. The destruction of such media is conducted using degaussing procedures.
 - In cases of information stored on CD/DVD, a CD/DVD grinder is used to remove the optical area of the CD/DVD where the data is stored. CDs and DVDs are then shredded. The degaussing, grinding and shredding occur in a secured LHM work space. The degaussing process is used for all other media.
 - When a classified computer must be excessed, NOG contract staff who
 possesses a clearance at the Secret level (or higher) removes the
 device's hard drive to degauss/grind it, following requirements outlined in
 GAO Directive 0910.1-02. The computer body is delivered to LHM, who
 record that the process took place on the asset's record in Asset Manager.
 LHM then excess the equipment using procedures outlined in ISTS-LHM4: Preparing IT Assets for Excess.
- **8.6 Field Office Processes**. ISTS field office staff work with the field office Security Officers (usually the Administrative Officer in each field office) to manage IT assets that process classified information. Generally, custody of classified notebooks is assigned in Asset Manager to a secure facility rather than to an

individual. As in HQ, chain of custody to/from individuals is tracked in a Notebook Issuance Logbook.

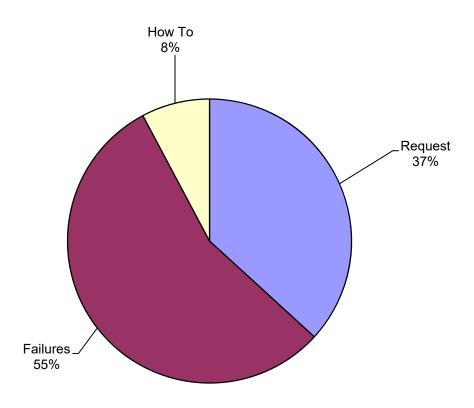




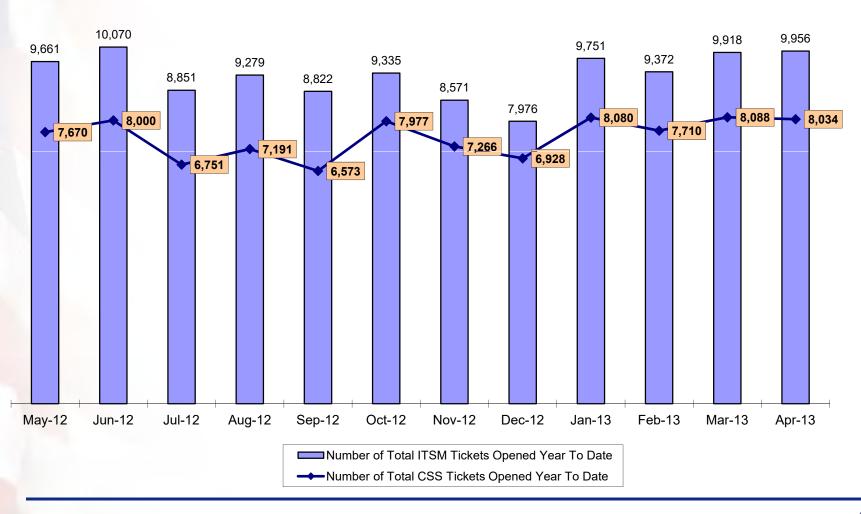


Customer Support Services

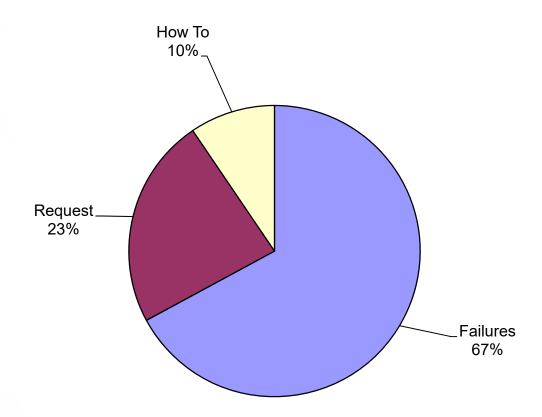
Breakdown of Total ITSM Incidents by Type for April 2013 Based on 9,956 Tickets



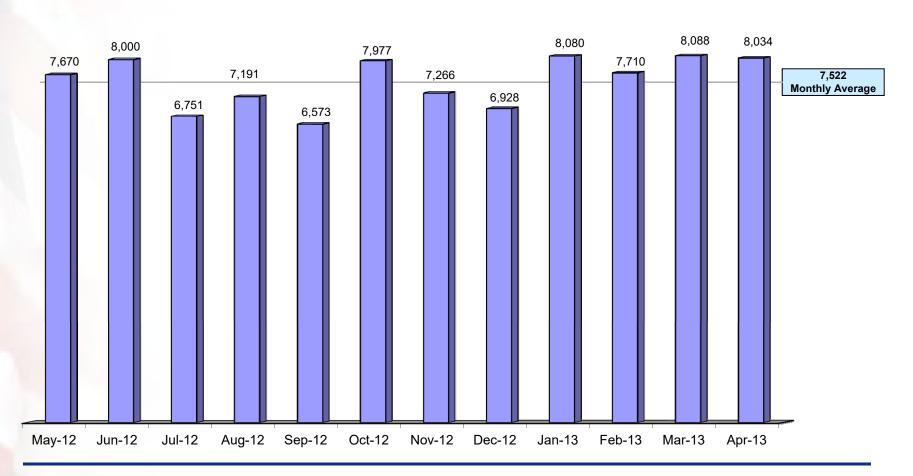
Total of all ITSM Incidents for the past twelve months



CSS/Tier 1 Incidents by Type for April 2013 based on 8,034 Incident Tickets



CSS/Tier 1 Incident Ticket Activity for the past twelve months



Breakdown of Failure Incidents for April 2013 based on 3,249 CSS/Tier 1 Incident Tickets

Top DM Issues

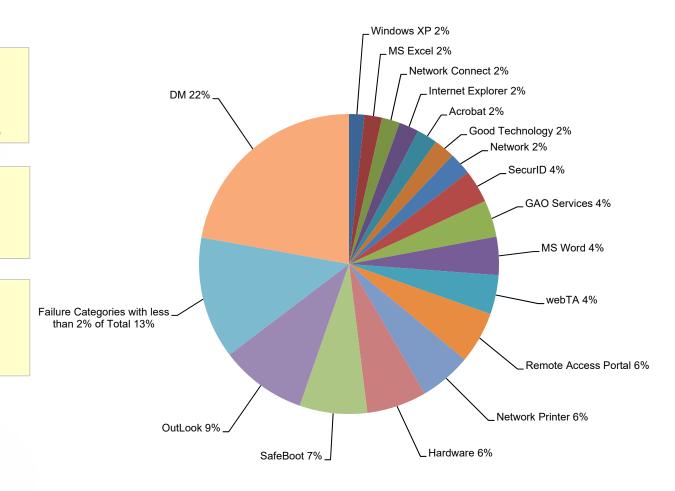
- 1. Checking In/Out Document 329
- 2. Saving File 109
- 3. Opening File 63
- 4. Application Lockups 58
- 5. Unable to Launch Application 45

Top Outlook Issues

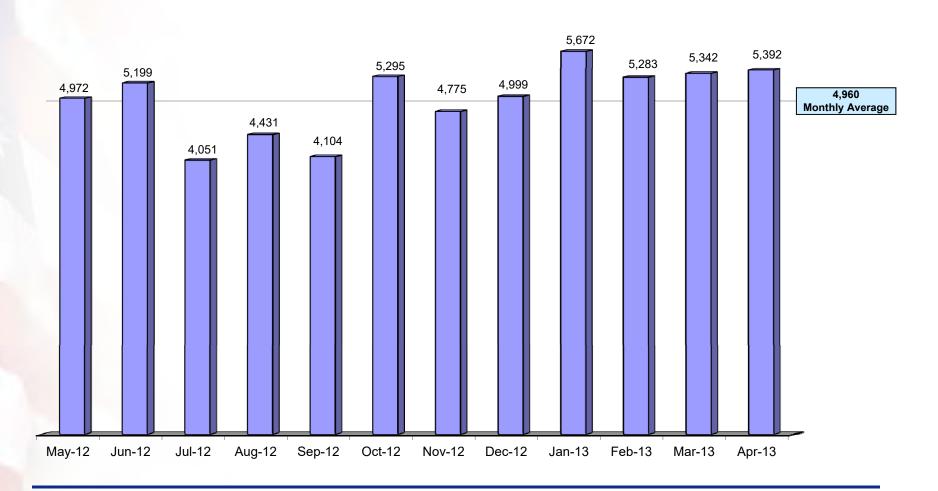
- 1. Receiving Message 42
- 2. Application Lockups 33
- 3. Calendar 33
- 4. Composing Message 22
- 5. Inbox 21

Topics with 2% or less of Total

- 1. One-X 31
- 2. Phone Line 30
- 3. GAO HQ Wireless Service 24
- 4. GovTrip 23
- 5. JIS 23



CSS/Tier 1 Failure Incident Ticket Activity for the past twelve months



Breakdown of HowTo Incidents for April 2013 based on 762 CSS/Tier 1 Tickets

Top Outlook Questions

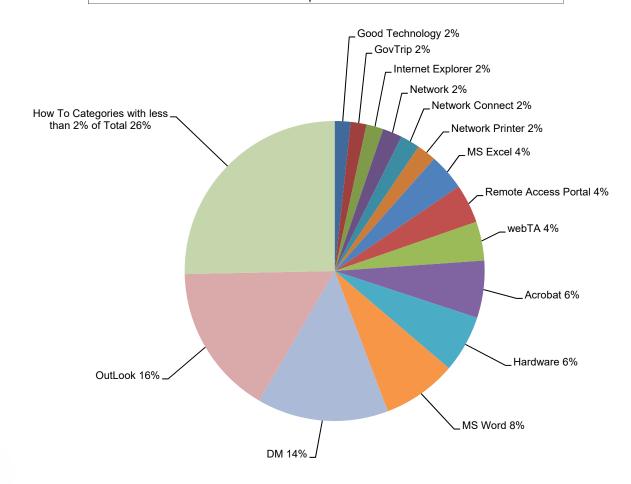
- 1. Calendar 23
- 2. Settings 19
- 3. Attaching File 13
- 4. Inbox 13
- 5. Composing Message 9

Top DM Questions

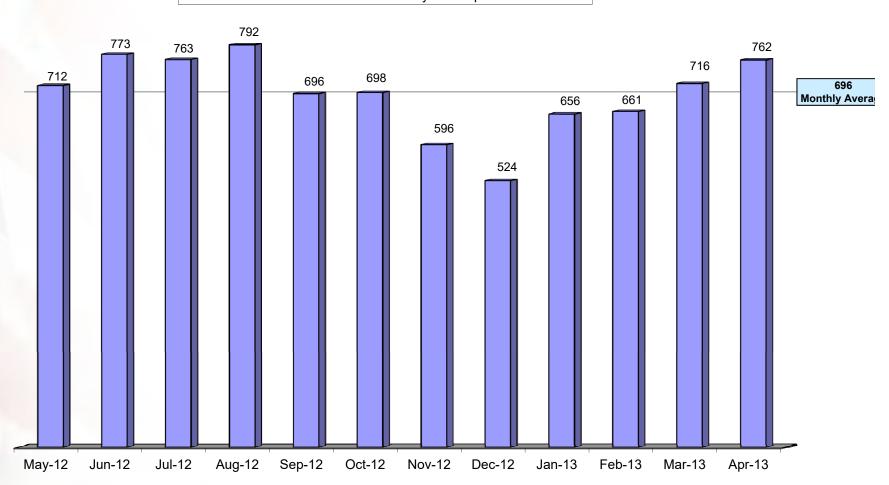
- 1. Saving File 31
- 2. Workspaces 15
- 3. Updating Access Rights 14
- 4. Searching 9
- 5 Updating Profile 9

Categories with 2% or less of Total

- 1. GAO Services 11
- 2. Phone Line 11
- 3. WebEx 11
- 4. Windows XP 11
- 5. MS PowerPoint 9



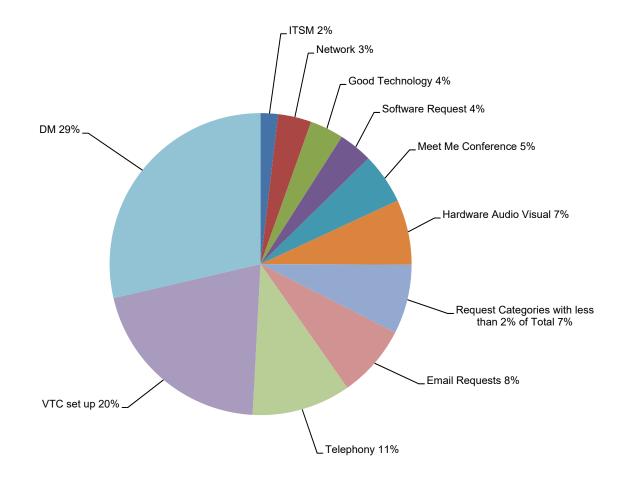
CSS/Tier 1 HowTo Incident Ticket Activity for the past twelve months



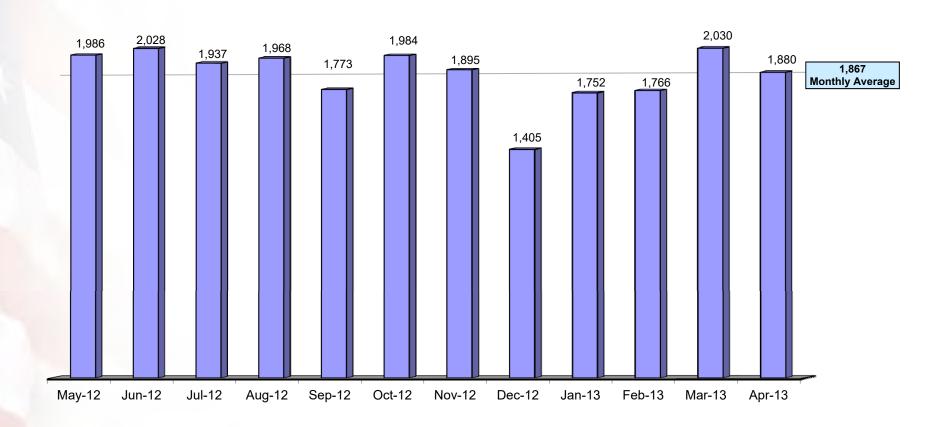
Breakdown of Service Requests for April 2013 based on 1,880 CSS/Tier 1 Incident Tickets

Requests with 2% or less of Total

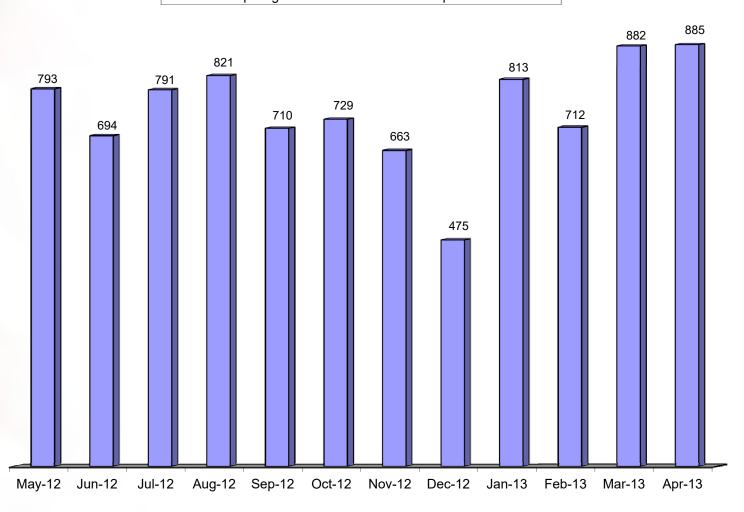
- 1. Physical Move 28
- 2. Instant Meeting 21
- 3. Account Creation 20
- 4. Account Deletion 19
- 5. Data Center 16



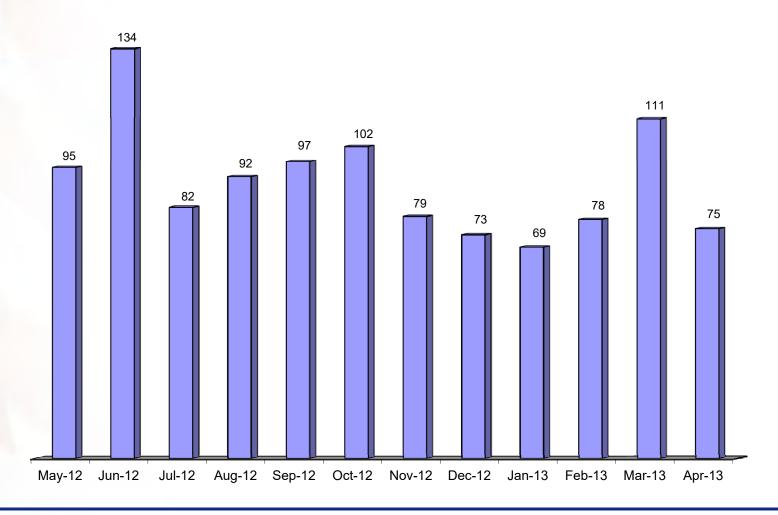
CSS/Tier 1 Service Requests Incident Ticket Activity for the past twelve months

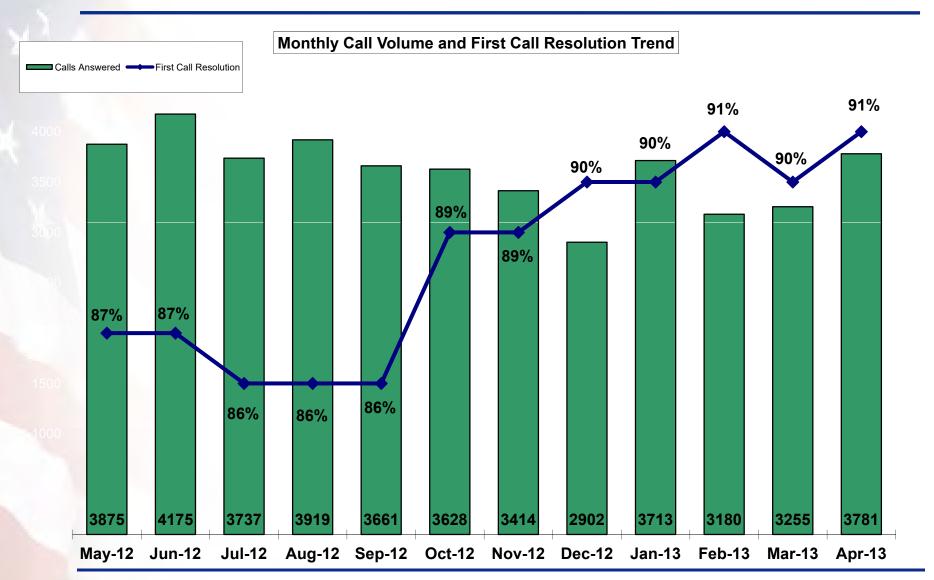


Incidents Requiring Remote Assistance for the past twelve months

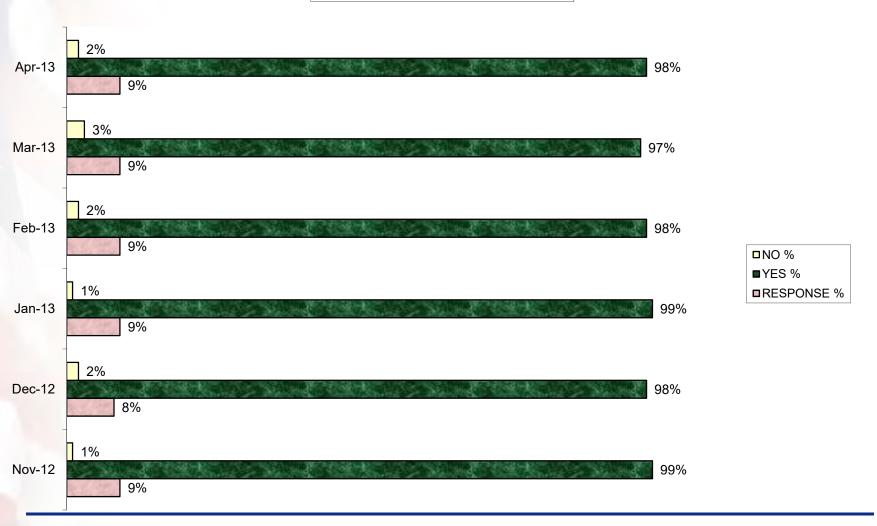


Audio Visual Requests for the past twelve months



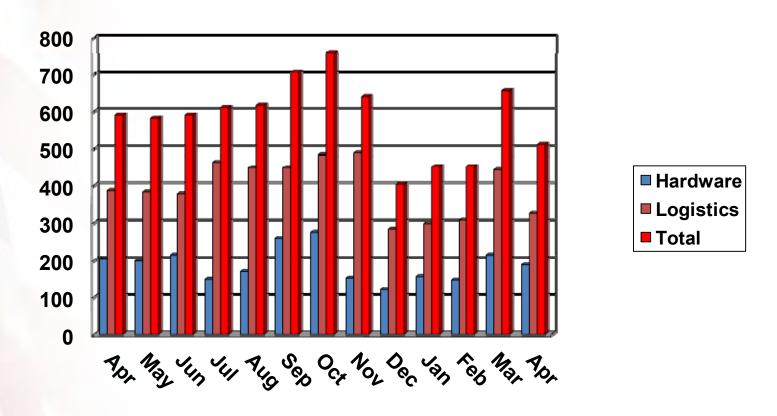






Logistics and Hardware Maintenance

Total Tickets by Month for the Previous Year

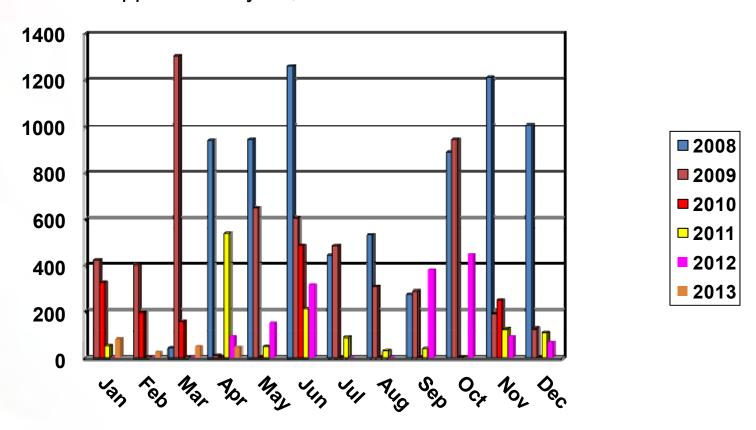


This graph depicts the trends in support requirements for Logistics and Hardware Maintenance.

Logistics and Hardware Maintenance (cont'd)

Assets Excessed from March 2008 to Present

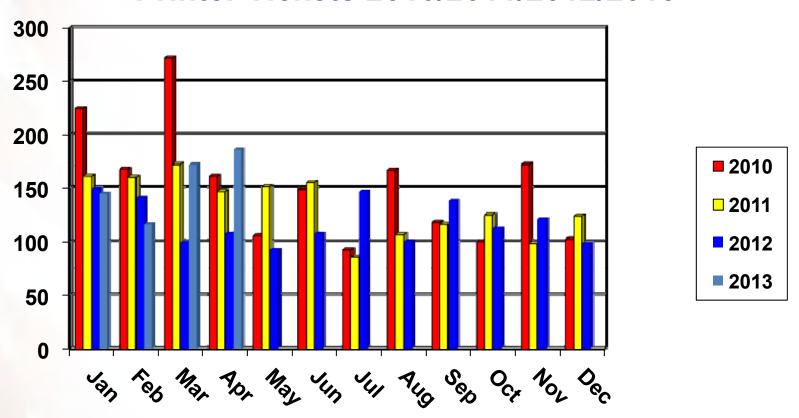
Approximately 17,691 Items Excessed



LHM and GAO worked collaboratively to achieve an unprecedented result for total items removed from inventory.

Logistics and Hardware Maintenance (cont'd)

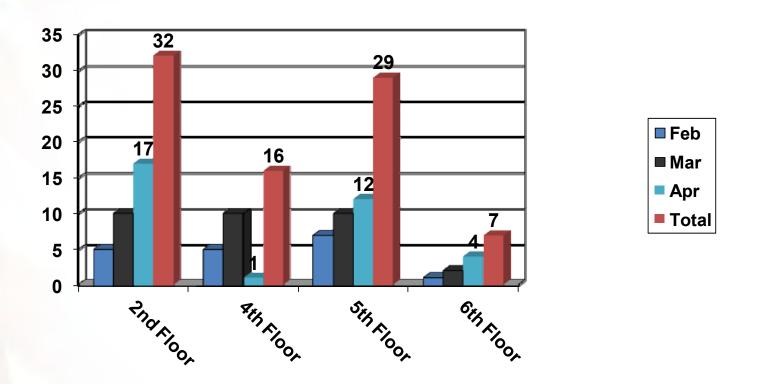
Printer Tickets 2010/2011/2012/2013



This graph represents the total printer calls taken by the Hardware Team. It displays the cyclical trend of our business cycle here at GAO.

Logistics and Hardware Maintenance (cont'd)

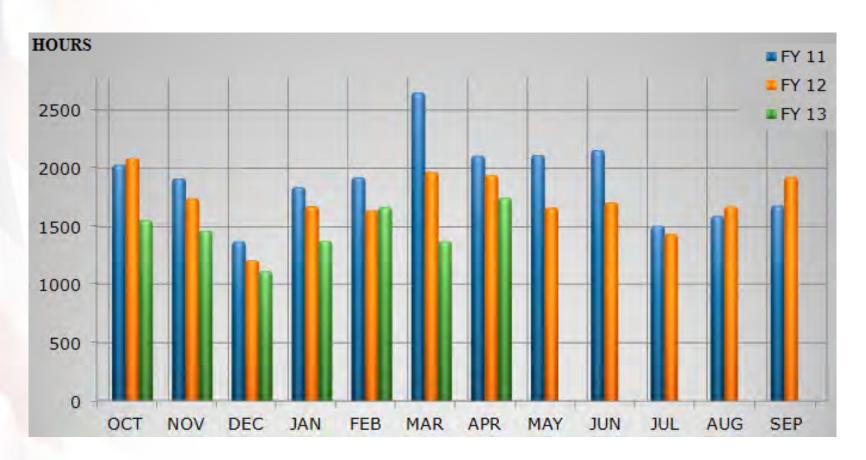
Shared Service Center Xerox Printer TicketsLast 3 Months



This graph represents the total Xerox printer calls for the Shared Service Centers for the previous three months, by month with quarterly totals.

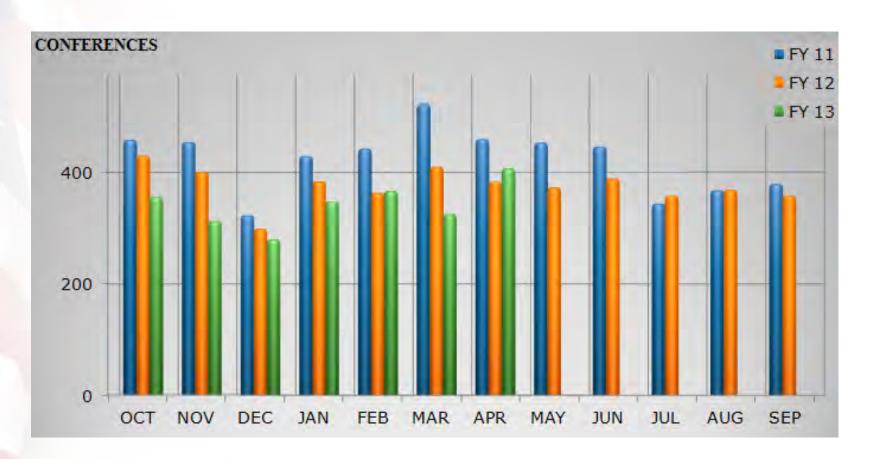
Videoconference Support

NETWORK HOURS

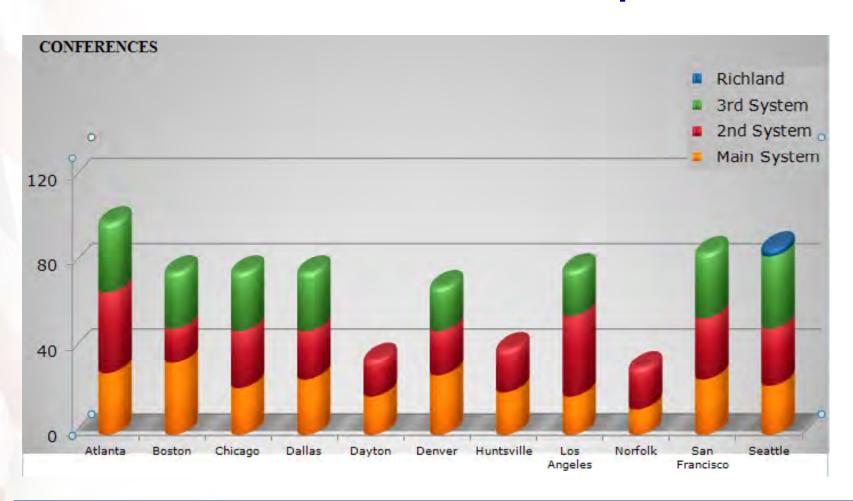


NETWORK CONFERENCES

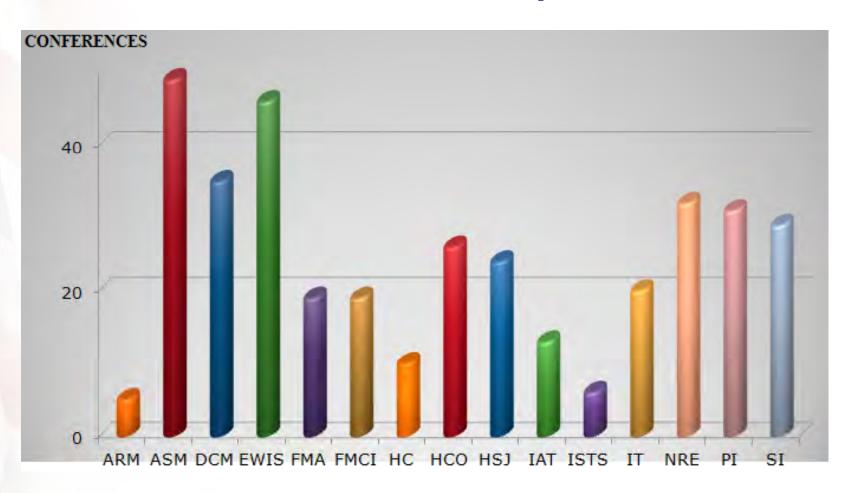
(Multipoint & Point-to-Point)



USAGE BY FIELD OFFICE - April 2013



USAGE BY TEAM - April 2013



VTC SCHEDULE REQUESTS - April 2013

Cheduing Conflicts Alleriate Date Time By Pho

	_ `	/ -		/ \	_ \	_ `
APR	360	19	0	1	30	0
MAY	440	20	0	1	21	2
JUN	421	32	1	3	34	1
JUL	394	23	0	4	23	4
AUG	358	20	0	3	23	1
SEP	379	17	2	1	14	1
OCT	413	15	0	0	20	0
NOV	497	20	1	3	23	2
DEC	340	17	0	0	11	5
JAN	572	22	1	0	29	2
FEB	308	62	2	1	55	1
MAR	311	19	0	2	28	1
APR	328	16	2	2	15	0

	ATL	BOS	CHI	DAL	DAY	DEN	HUNT	LA	NOR	SF	SEA
APR	10	2	1	0	2	8	2	0	0	1	4
MAY	7	3	2	0	0	3	0	0	1	0	7
JUN	7	2	8	8	1	0	0	3	1	2	8
JUL	7	7	5	3	1	1	3	1	0	2	8
AUG	5	2	7	3	2	1	0	1	3	2	4
SEP	8	0	1	2	0	1	0	0	1	1	3
OCT	2	4	2	0	1	2	0	1	3	2	3
NOV	6	3	1	3	0	3	1	0	0	10	5
DEC	3	9	2	0	0	3	0	0	2	5	8
JAN	10	0	1	5	2	0	3	3	3	4	4
FEB	13	10	2	10	5	4	3	4	1	6	11
MAR	11	5	1	4	1	2	1	1	1	4	5
APR	4	0	2	3	2	3	2	0	0	2	3

ISTS Information Technology Governance Process

This document describes the GAO ISTS Information Technology Governance Process and corresponds to a process diagram found in (DM#112910 – Visio, DM#112911 – PDF).

Work Initiation

During 'Work Initiation', the Project Manager (PM) has been identified by a group Director to initiate the work process.

- No authorization to expend new funds on procurements or new contractors has been granted.
- Limited authorization has been granted to expend existing resources (specifically, the contractors and staff necessary to help develop the WIF).

1. "PM completes Work Initiation Form (WIF)"

The Project Manager, as assigned by an ISTS Director, completes the Work Initiation Form (WIF) within the Work Management System (WMS).

2. "EAAG Segment Lead signs off on the WIF"

The EAAG Segment Lead then begins EAAG's process, as documented in DM#5288994 and checks the box "Segment Lead Approval" on the WIF form in WMS. This completes work initiation and begins Work/Project Planning (i.e. expenditure of existing resources – contractor time and staff time) to take place.

Work/Project Planning

During 'Work/Project Planning', the Project Manager (PM) provides information and gathers feedback to help develop and improve the accuracy of the project proposal.

- No authorization to expended new funds on procurements or new contractors has been granted.
- Limited authorization has been granted to expend existing resources (specifically, the contractors and staff necessary to help develop the proposal).

The PM will work with three working groups – the Work Initiation and Review Meeting Working Group (WIRM WG), the Integrated Assessment Working Group (IAWG) and the Service Design Working Group (SDWG), as well as ISTS's Procurement Manager and Contract Manager in the Operations and Planning Group.

1. "WIRM Working Group" (WIRMWG)

The WIRMWG oversees all work/projects for the purpose of improving project management related performance – focusing on scope, schedule, budget, risk.

During the WIRMWG review, the chairs of the IAWG and SDWG determine the need for review by the IAWG and/or the SDWG. If the proposed work/project is NOT already included within the fiscal year budget, the WIRMWG schedules the PM to present the WIF at the WIRM. The WIRM Working Group charter may be found in DM#148224.

ISTS Information Technology Governance Process

2. "Integrated Assessment Working Group" (IAWG)

The IAWG reviews all work/projects identified by the chair of the IAWG for the purpose of project impact on the organization - focusing on business alignment, technology alignment, security, continuity, records, privacy, and customer impact.

Practically, the IAWG reviews the proposed work/project, determines the need for Privacy Assessments, Records compliance, System Security Plan creation/updates, Continuity Plan creation/updates, and Organizational Change Management processes (i.e. training, notices, etc...). The IAWG works with the SDWG as issues are clarified that may impact the other. The IAWG develops a recommendation that goes to the WIRMWG and the PM as input to the Project Proposal.

The Integrated Assessment Working Group charter may be found in DM#5040078.

3. "Service Design Working Group" (SDWG)

The SDWG reviews all work/projects identified by the chair of the SDWG for the purpose of project impact on the existing technology - focusing on design and project impacts.

Practically, the SDWG reviews the proposed work/project (possibly with the PM as appropriate), and advises on the need for procurements and contractor/consulting work to design, test, implement or support the project. The SDWG includes several ISTS groups as well as contract management staff to help further develop the high-level project design considerations. The SDWG works with the IAWG as issues are clarified that may impact the other. The SDWG develops a recommendation document that goes to the WIRMWG and the PM as input to the Project Proposal and to the CRRG as input to the CRRB vote at the Transition Readiness Review Meeting for the project.

The Service Design Working Group charter may be found in DM#5226924.

4. PM works with OPG on Procurement (optional)

If necessary, the Project Manager works with the ISTS Procurement Manager to develop a procurement plan appropriate to the project and obtain any necessary cost estimates. Cost estimates are either obtained by the Project Manager under approved methods by the Procurement Manager, or are obtained by the Procurement Manager and provided to the Project Manager.

The information obtained should be included in the Project Proposal.

5. PM works with OPG on Subproject Request (optional)

If necessary, the Project Manager works with the ISTS Contract Manager to produce a request a Sub-Project ROM (considering input from the IAWG and SDWG) appropriate to the project and obtain any necessary cost estimates. The ISTS Contract Manager returns any completed ROM's to the Project Manager.

The information obtained should be included in the Project Proposal.

6. Project Proposal

The Project Proposal is created by the Project Manager with input from the WIRMWG, IAWG and SDWG, OPG Procurement (as necessary), and OPG Contract Management (as necessary).

The Project Proposal Template may be found in WMS and can be supported by external documents.

7. WIRMWG reviews Project Proposal

The WIRMWG will review the Project Proposal, confirm it's completion and schedule a WIRM meeting for review/approval by the CIO or his designee. The Project Proposal will be sent as a read-ahead to the WIRMWG, CIO (or his designee), and ISTS Group Directors before the scheduled WIRM meeting where it will be reviewed.

8. WIRM Meeting (CIO Approval)

The WIRM Meeting will have scheduled Project Managers brief proposals for approval by the CIO (or his designee). Approval, if received, will authorize procurements to go forward and Sub Project ROMs to be fulfilled. Should the proposal be rejected, the CIO may indicate to place the project in compendium for future consideration.

Work/Project Execution

During 'Work/Project Execution', the Project Manager (PM):

- Has authorization to expend new funds, as detailed in the approved proposal, on procurements or new contractors
- Has authorization to commit existing resources (specifically, the contractor and staff time necessary to execute the project).

Project Governance

1. PM prepares WIRM Status Updates

If project baselines (scope, schedule, budget, risk) change, or if the WIRMWG or CIO indicates sufficient time has passed between updates, the WIRMWG notifies the PM to prepare a Status Updates for presentation at the WIRM.

2. WIRM Meeting (CIO review)

The PM will present the Status Update presentation, complete with baselines (revised if necessary). The CIO will approve the project to continue, or reject the project and indicate one of three options:

- 1. Put the project into compendium (i.e. 'on hold')
- 2. Close out the project.
- 3. Return to the WIRM with further information for another Status Update presentation.
- 3. Project Placed in Compendium
- 4. PM closes out project

Service Design

1. Service Design Process

During the Service Design Process, the Project Team produces the deliverables identified in the Service Design Working Group Recommendation. The SDWG is available for consultation on the quality of products.

2. Service Design Package

The Service Design Package is minimally identified in the SDWG Recommendation.

After completion of the Service Design phase, the project will move to the Service Transition Phase via the CRRB - Transition Readiness Review Meeting. In order to conduct the CRRB - Transition Readiness Review Meeting, the PM will contact the CRRB manager to provide the documents that were completed in Service Design. The CRRB Manager will schedule the CRRB meeting and send out the completed documents as read-ahead material to the board

CRRB – Transition Readiness Review Meeting: The CRRB will meet to:

- -Verify that all Service Design Artifacts are completed
- Verify that the QA tests have been developed
- Verify that Project Baselines (scope, schedule, budget) are still accurate or if changes need to be made
- Confirm that the project is ready to move forward to the Service Transition phase.

WIRM Status Update: After the CRRB - Transition Readiness Review Meeting is completed, the WIRMWG lead will schedule an appearance by the PM at an upcoming WIRM meeting to provide a status of the project.

IF PROJECT BASELINES ARE NOT CHANGED - The CIO is informed that the project has completed design and is moving forward to the transition phase.

IF PROJECT BASELINES CHANGED - The CIO evaluates the Project Proposal including revised project baselines (scope, schedule, and budget). With CIO approval at the WIRM, the project proceeds under the new baselines.

Service Transition

1. Service Transition Process

During the Service Transition Phase, the Project Team (consisting of resources identified in the Project Proposal) performs transition work in conjunction with QA/Change Management/Operations staff.

- All technical work is done in the Development environment
- QA Tests are executed and results are documented

- SOPs are written; PM coordinates with operational staff on development and acceptance of SOPs
- Change Management initiatives may begin working with customer staff
- Customer Training initiatives may begin.

2. Service Transition Package

The Service Transition Package is identified in the SDWG Recommendations.

After completion of the Service Transition phase, the project will move to the Service Operation Phase via the CRRB - Operational Readiness Review Meeting. In order to conduct the CRRB - Opeational Readiness Review Meeting, the PM will contact the CRRB manager to provide the documents that were completed in Service Transition. The CRRB Manager will schedule the CRRB meeting and send out the completed documents as read-ahead material to the board

CRRB - Operational Readiness Review Meeting: The CRRB will meet to:

- -Verify that all Service Transition Artifacts are completed
- Verify that the QA tests have been completed and passes successfully
- Verify that Project Baselines (scope, schedule, budget) are still accurate or if changes need to be made
- Verify (update Configuration Control) that SOPs (specified by SDWG and any other evident needs) have been developed and accepted by the responsible operational group
- Verify (update Configuration Control) that Hardening Standards have been implemented in Tripwire and a baseline has been developed
- Verify (update Configuration Control) and review QA Test results
- Confirm that the project is ready to move forward to the Service Operation phase.

WIRM Status Update: After the CRRB - Operational Readiness Review Meeting is completed; the WIRMWG lead will schedule an appearance by the PM at an upcoming WIRM meeting to provide a status of the project.

IF PROJECT BASELINES ARE NOT CHANGED - The CIO is informed that the project has completed design and is moving forward to the Operation Phase.

IF PROJECT BASELINES CHANGED - The CIO evaluates the Project Proposal including revised project baselines (scope, schedule, and budget). With CIO approval at the WIRM, the project proceeds under the new baselines.

Service Operation

1. Service Deployment Process

The Project Team (consisting of resources identified in the Project Proposal) performs implementation work in conjunction with Operations/Tier II Staff

- All technical work is done in the Operational environment and the project puts the change into 'operational' status
- Pilots are executed (as appropriate)
- Rollouts are executed (as appropriate)

2. Service Operations

The PM contacts the WIRMWG Lead to schedule a WIRM Post Implementation Review presentation at the WIRM

At the Work Initiation and Review Meeting:

- The PM completes a PIR presentation



Chief Information Officer (CIO)

Cross-Cutting Functions

Customer Relations (CRG)

Enterprise Architecture and Applications (EAAG) Information Systems Security (ISSG)

Operational Readiness (ORG)

Budget, Acquisition and Contracting (BACG)

Operational Units

Web Services (WSG) Network Operations (NOG)

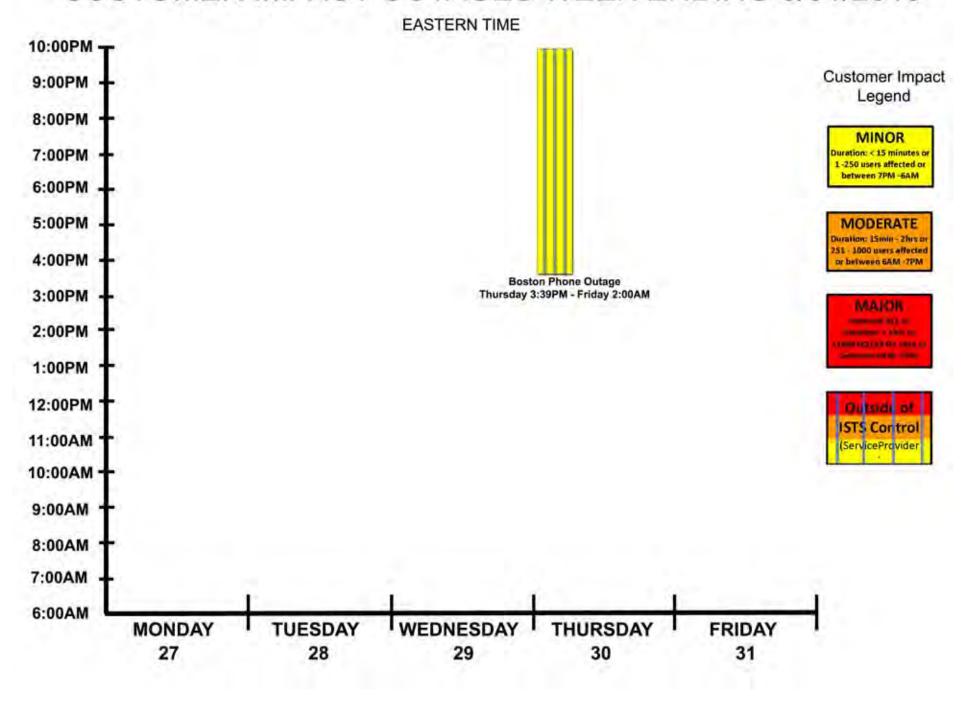
Telecom. Services (TSG)

Content Services Group (CSG)

Publishing and Dissemination Group (PDG)

Revised: 2/5/13

CUSTOMER IMPACT OUTAGES WEEK ENDING 5/31/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

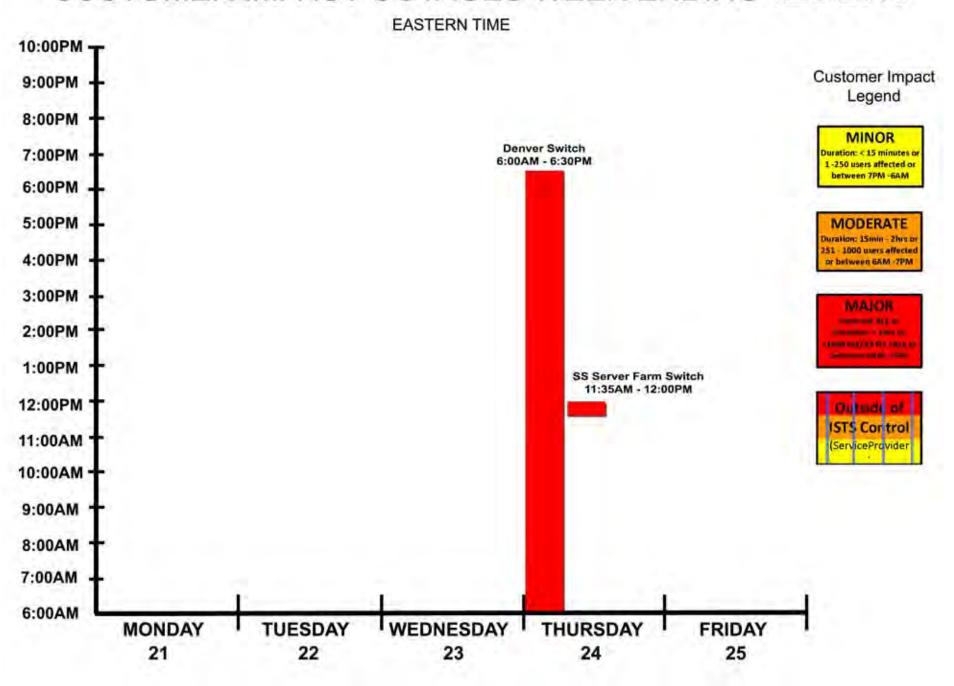
Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Thursday, May 30th 3:39PM – Friday, May 31st 2:00AM

Problem Type: Network
Net log Category: Hardware
Problem Ticket: 8442

Net Log: Boston users are unable to receive calls.

CUSTOMER IMPACT OUTAGES WEEK ENDING 1/25/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Thursday, January 24th 6:00AM -6:30PM

Problem Type: Network
Net log Category: Hardware
Problem Ticket: 7591

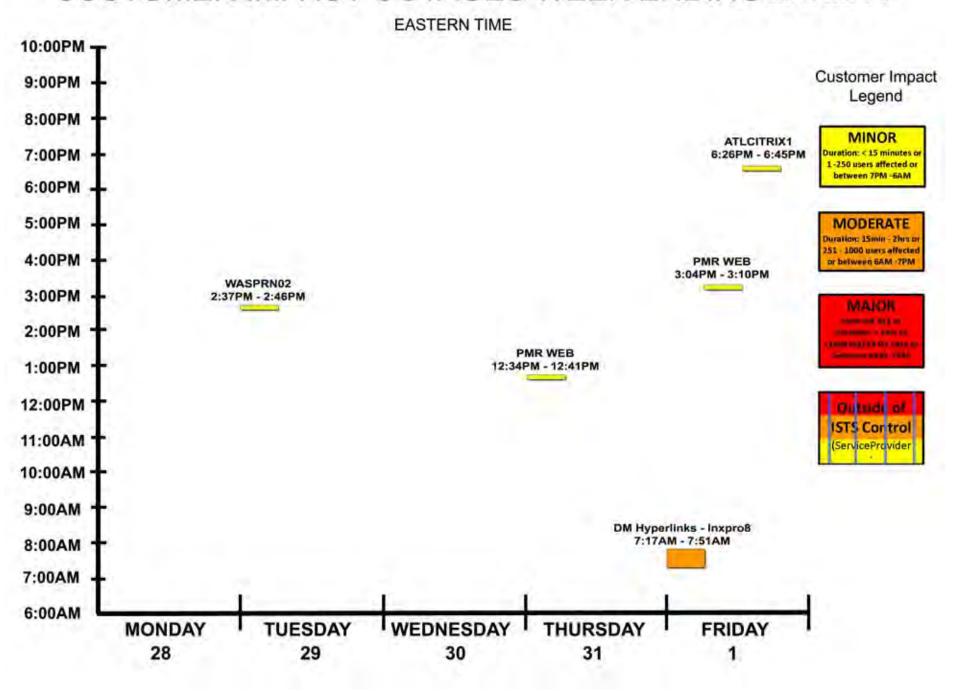
Net Log: Denver switch is down.

Thursday, January 24th 11:35AM -12:00PM

Problem Type: Network
Net log Category: Hardware
Problem Ticket: 7598

Net Log: Connectivity issue involving SS server farm switch.

CUSTOMER IMPACT OUTAGES WEEK ENDING 2/1/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Tuesday, January 29th 2:37PM -2:46PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7614

Net Log: Web Management on WASPRN02 is down.

Thursday, January 31st 12:34PM -12:41PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7632

Net Log: PMR Web Monitors on PMR is down.

Friday, February 1st 7:17AM –7:51AM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7642

Net Log: Atlanta Citrix and suddenly unable to click and open DM Hyperlinks.

Friday, February 1st 3:04PM -3:10PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7647

Net Log: At least one component of the application monitored as PMR Web Monitors on server PMR is down.

Friday, February 1st 6:26PM -6:45PM

Problem Type: Network
Net log Category: Application

Problem Ticket: 7650

Net Log: ATLCITRIX1 connection issue.

NOTE:

Thursday, January 31st 6:00AM -

Problem Type: Network

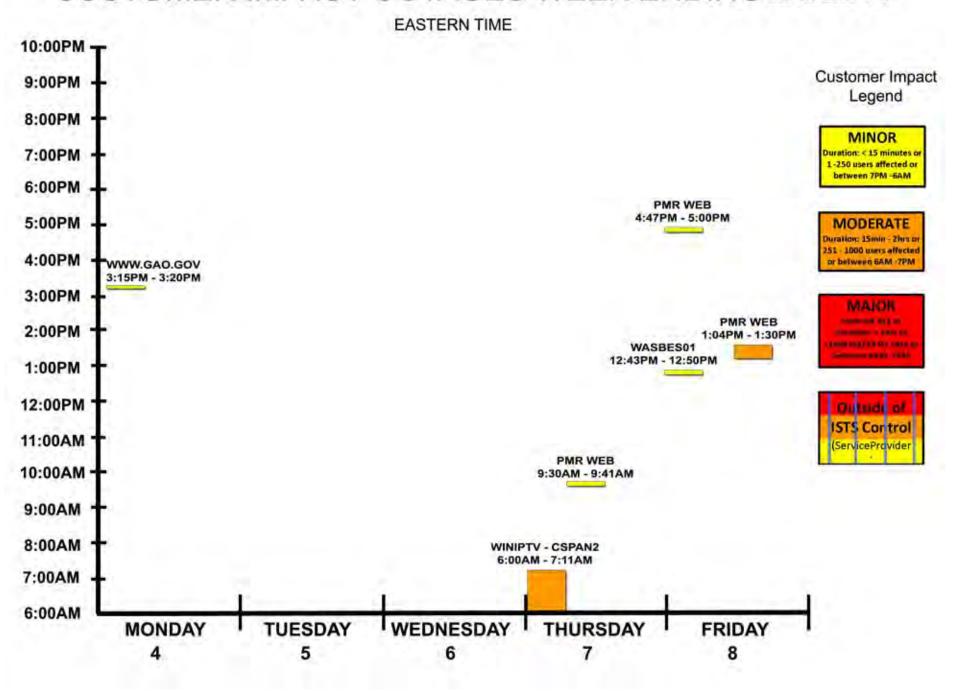
Net log Category: Application

Problem Ticket: 7634

Net Log: The Help Desk has received several calls from Mac customers today indicating that they are having problems trying to load the Mac/Linux Citrix Desktop. Customers indicate that they are receiving a message that a plug-in is missing. When they click the plug, it prompts them to download Java. We have been advising customers to visit Java.com to download the latest version of Java and also try accessing through Firefox.

A user just reported right now that he was unable to download Java and noticed that there are several news articles posted today indicating that Apple has blocked Java (http://www.nbcnews.com/technology/technolog/apple-blocks-java-macs-due-vulnerabilities-1B8186534#).

CUSTOMER IMPACT OUTAGES WEEK ENDING 2/8/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Monday, February 4th 3:15PM -3:20PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7669

Net Log: We received a report from Wade Strickland about 3:15 that www was down.

Thursday, February 7th 6:00AM -7:11AM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7694

Net Log: CSpan2 is down.

Thursday, February 7th 9:30AM -9:41AM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7696

Net Log: Linux Based Application PMR Web Monitors on server PMR is down.

Friday, February 8th 12:43PM – 12:50PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7703

Net Log: WASBES01: Blackberry failed to send and receive messages. Internet browsing failed.

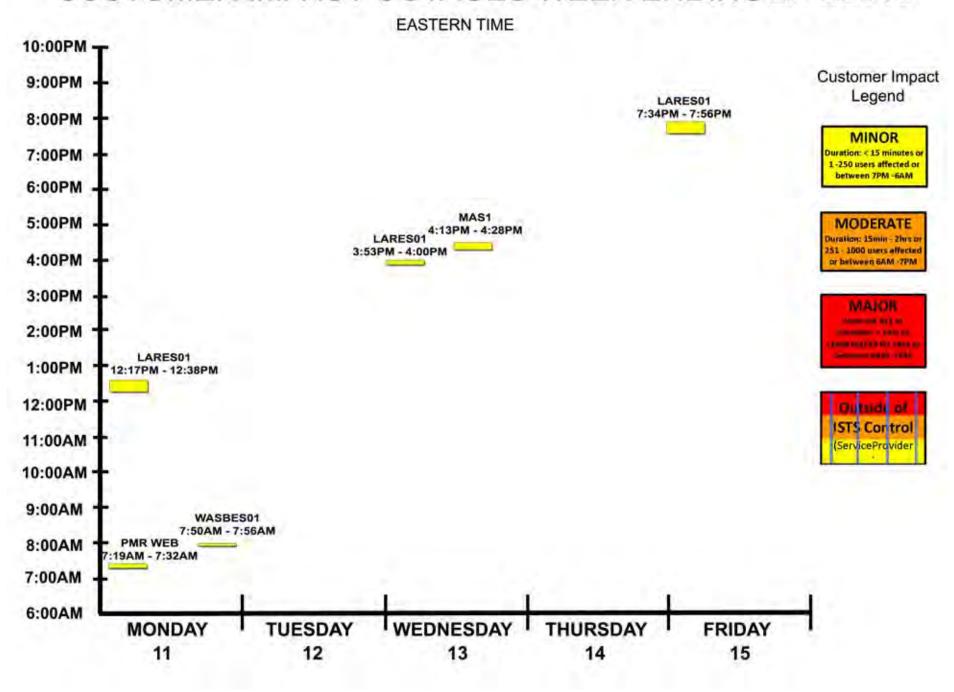
Friday, February 8th 1:04PM -1:30PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7704

Net Log: PMR cannot send updates to SOLR at http://find.gao.gov.

Friday, February 8th 4:47PM – 5:00PM
Problem Type: Network
Net log Category: Application
Problem Ticket: 7706
Net Log: PMR cannot send updates to SOLR at http://find.gao.gov.

CUSTOMER IMPACT OUTAGES WEEK ENDING 2/15/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Monday, February 11th 7:19AM -7:32AM

Problem Type: Network
Net log Category: Application

Problem Ticket: 7711

Net Log: PMR cannot send updates to SOLR at http://find.gao.gov.

Monday, February 11th 7:50AM -7:56AM

Problem Type: Network
Net log Category: Application

Problem Ticket: 7712

Net Log: BES Alert for Blackberry Service on WASBES on WASBES01 is down.

Monday, February 11th 12:17PM -12:38PM

Problem Type: Network
Net log Category: Application

Problem Ticket: 7713

Net Log: LARES01 - Web Management is down.

Wednesday, February 13th 3:53PM – 4:00PM

Problem Type: Network Net log Category: Application

Problem Ticket: 7738

Net Log: LA Printers - Web Management on server LARES01 are down.

Wednesday, February 13th 4:13PM -4:28PM

Problem Type: Network **Net log Category:** Application

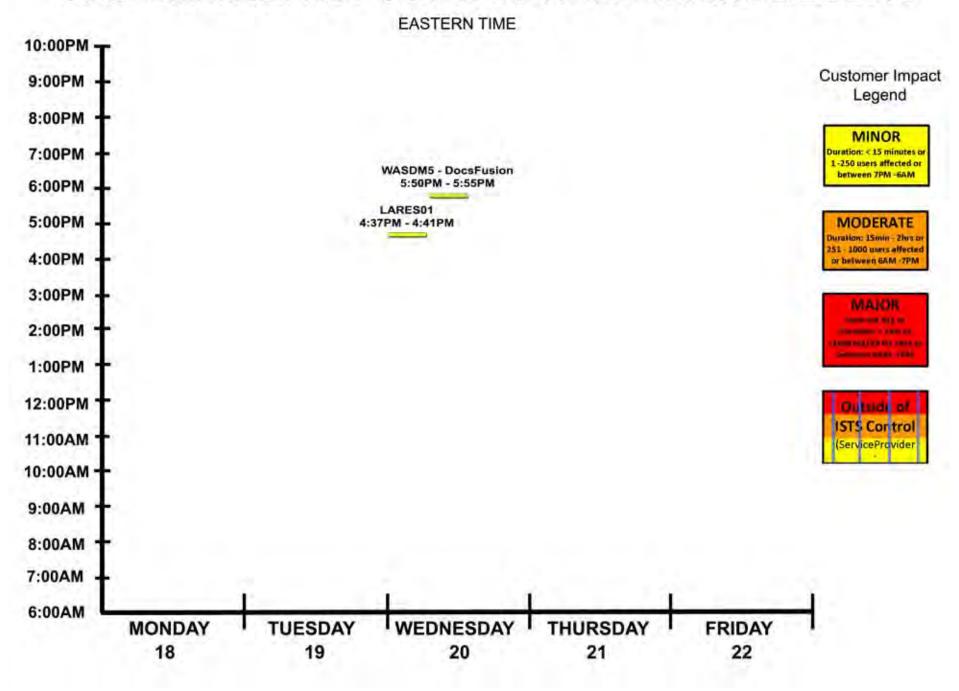
Problem Ticket: 7752

Net Log: Avaya voice mail users were unable to access their voice mail boxes.

Friday, February 15th 7:34PM – 7:56PM Problem Type: Network Net log Category: Application Problem Ticket: 7762

Net Log: Web Management on server LARES01 are down.

CUSTOMER IMPACT OUTAGES WEEK ENDING 2/22/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Wednesday, February 20th 4:37PM – 4:41PM

Problem Type: Network
Net log Category: Application

Problem Ticket: 7784

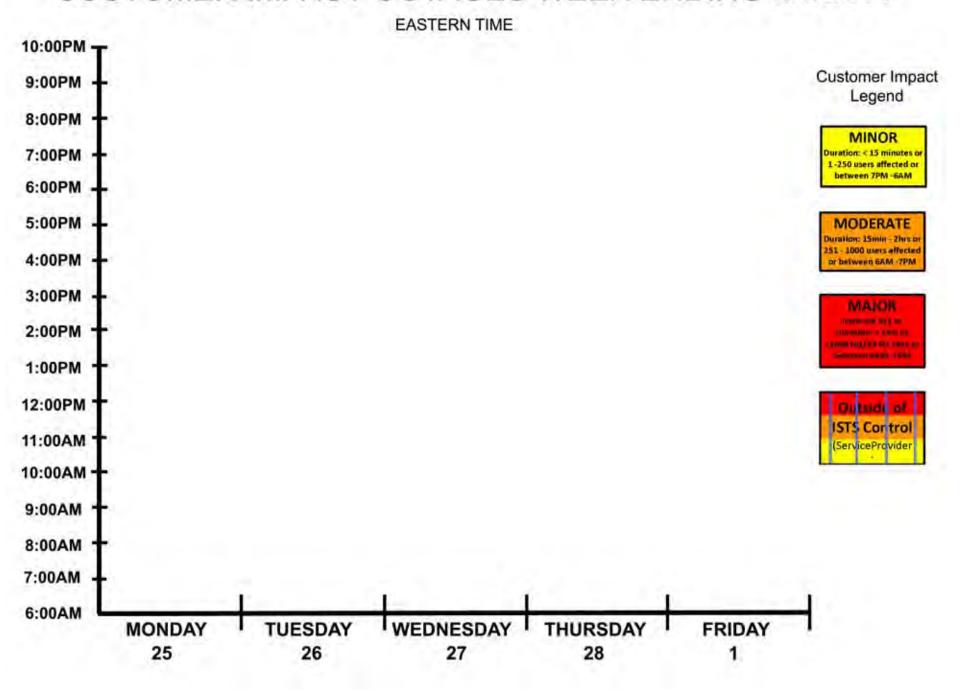
Net Log: Web Management on server LARES01 are down.

Wednesday, February 20th 5:50PM – 5:55PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7785

Net Log: DM - Lock Ups When Trying to Open Files or Folders.

CUSTOMER IMPACT OUTAGES WEEK ENDING 3/1/2013



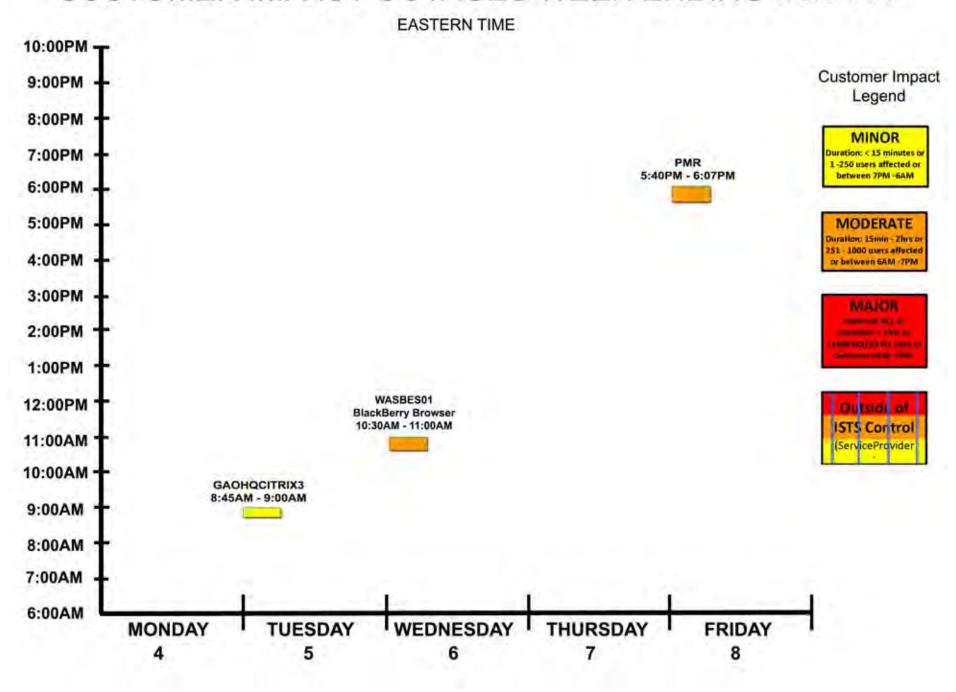
SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

CUSTOMER IMPACT OUTAGES WEEK ENDING 3/8/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Tuesday, March 5th 8:45AM - 9:00AM

Problem Type: Network
Net log Category: Application

Problem Ticket: 7857

Net Log: GAOHQCITRIX3 reboot.

Wednesday, March 6th 10:30AM - 11:00AM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7868

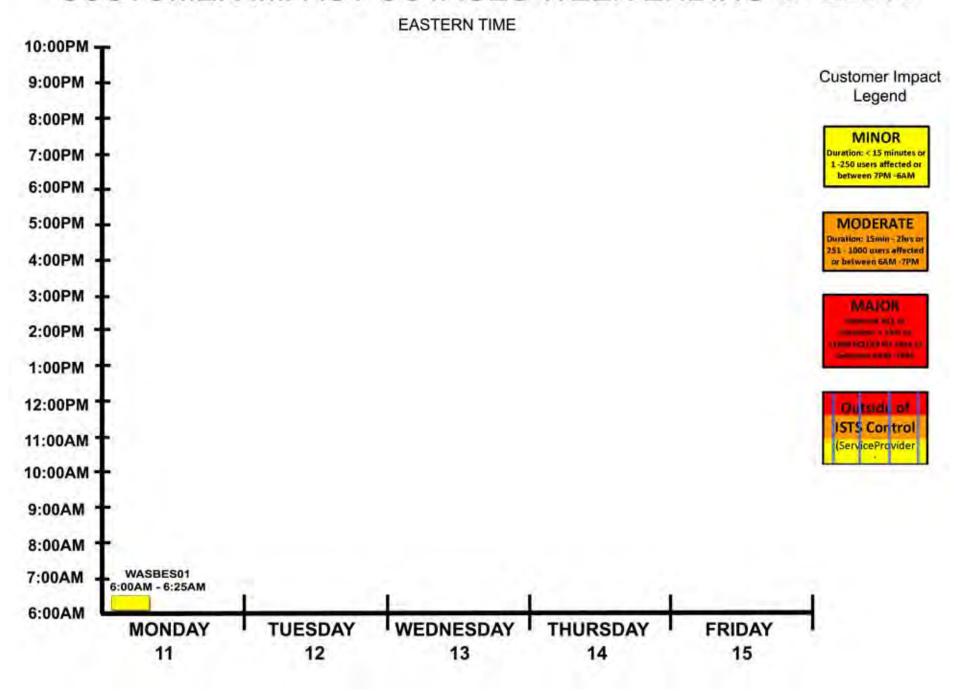
Net Log: Blackberry services behaving sporadically, and/or browser not available.

Friday, March 8th 5:40PM - 6:07PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 7879

Net Log: SolarWinds alert indicating that PMR was down.

CUSTOMER IMPACT OUTAGES WEEK ENDING 3/15/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Tuesday, March 11th 6:00AM - 6:25AM

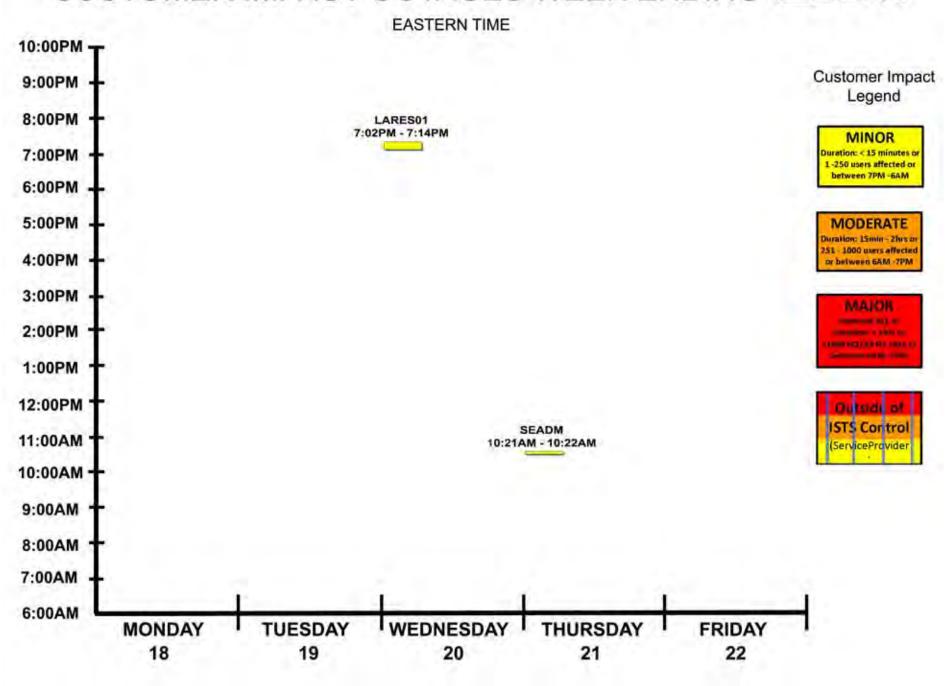
Problem Type: Network

Net log Category: Application

Problem Ticket: 7889

Net Log: WASBES01: Blackberry not receiving messages. 'Internal error' when accessing web services.

CUSTOMER IMPACT OUTAGES WEEK ENDING 3/22/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Wednesday, March 20th 7:02PM – 7:14PM

Problem Type: Network
Net log Category: Application

Problem Ticket: 7966

Net Log: LA Printers - Web Management on server LARES01 is down.

Thursday, March 21st 10:21AM – 10:22AM

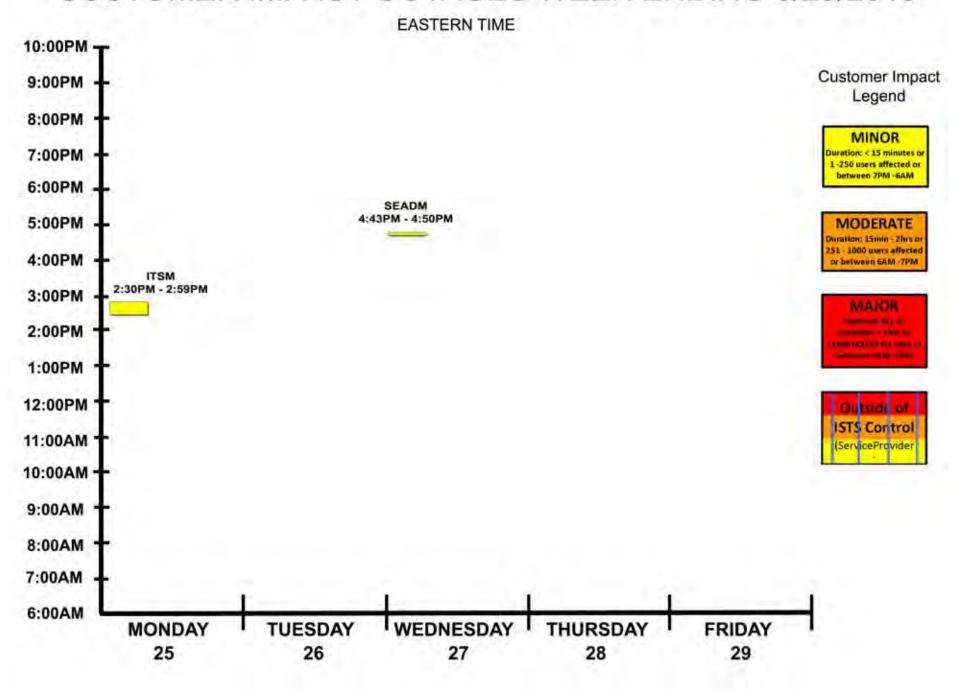
Problem Type: Network
Net log Category: Application
Problem Ticket: 7974

Problem Ticket. 7974

Net Log: DOCSFusion service crashed on SEADM at 10:21:17 (PST).



CUSTOMER IMPACT OUTAGES WEEK ENDING 3/29/2013



SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Monday, March 25th 2:30PM - 2:59PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 8008

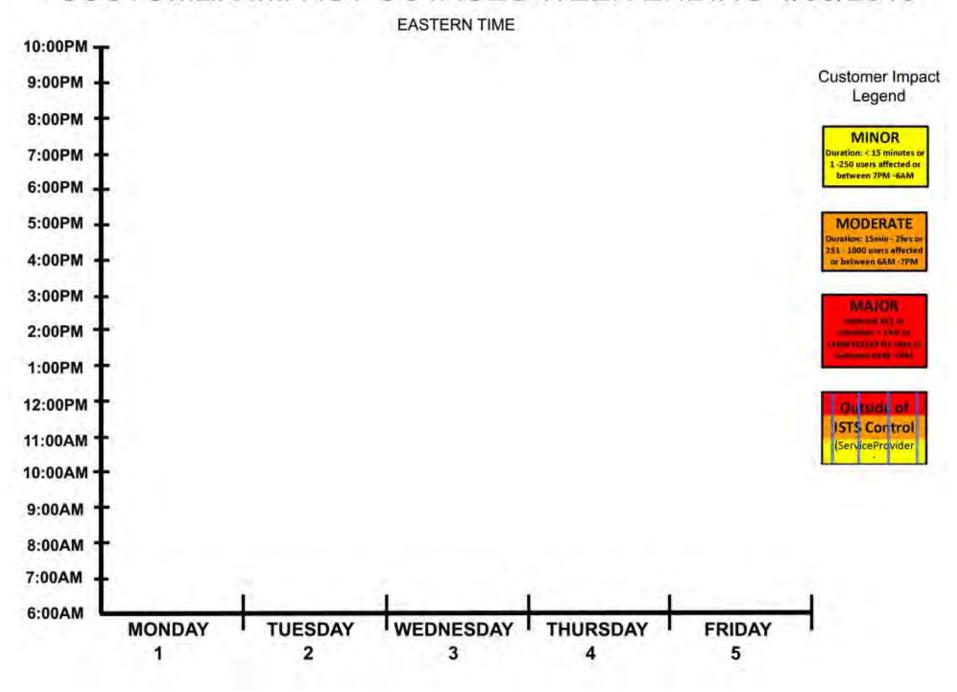
Net Log: ITSM slowness – Restarting services.

Wednesday, March 27th 4:43PM - 4:50PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 8033

Net Log: DOCSFusion service crashed on SEADM.

CUSTOMER IMPACT OUTAGES WEEK ENDING 4/05/2013



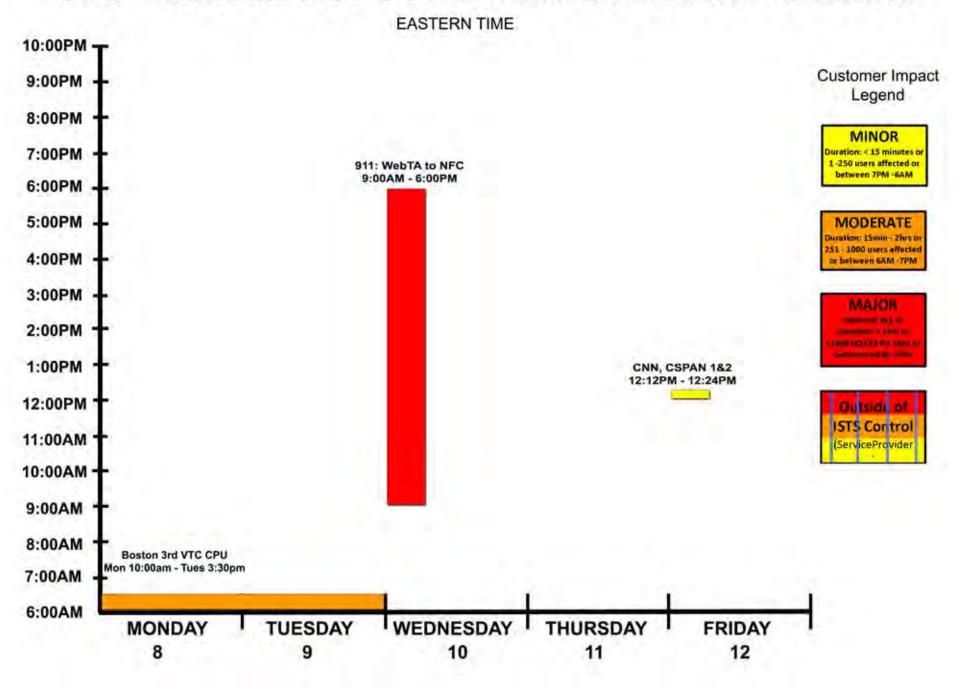
SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

CUSTOMER IMPACT OUTAGES WEEK ENDING 4/12/2013



Customer Impact Outage Criteria

SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Monday, April 8th 10:00AM - Tuesday. April 9th, 3:30PM

Problem Type: Network
Net log Category: Hardware
Problem Ticket: 8099

Net Log: FAILED HARDWARE: Boston 3rd VTC CPU will not power up.

Wednesday, April 10th 9:00AM - 6:00PM

Problem Type: Network
Net log Category: Application

Problem Ticket: 8112

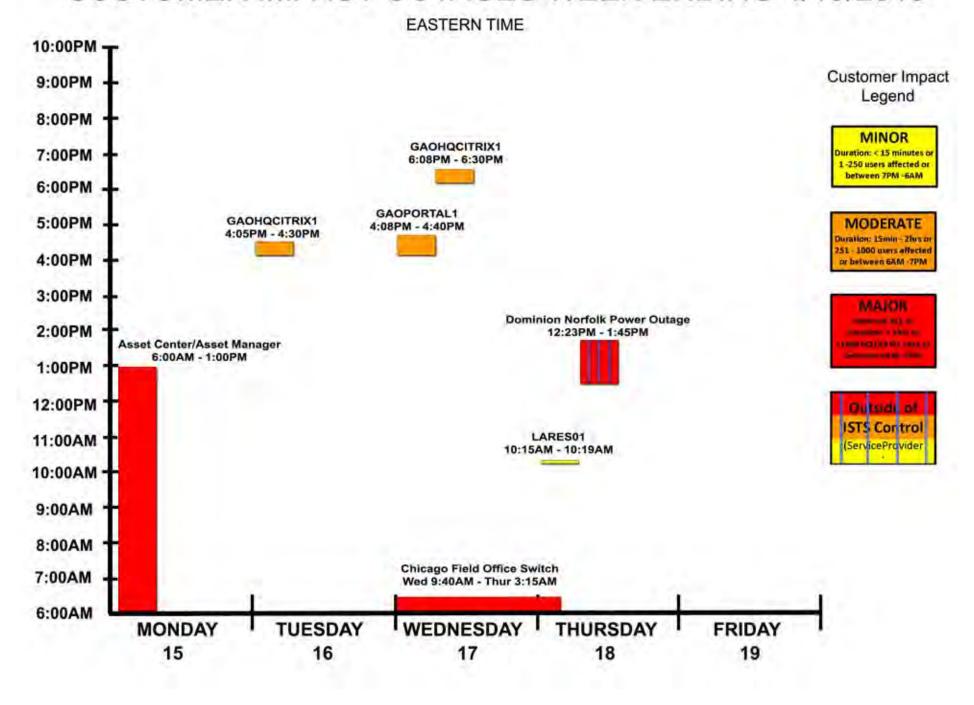
Net Log: 911: WebTA unable to send file to NFC for processing.

Friday, April 12th 12:12PM - 12:24PM

Problem Type: Network
Net log Category: Application
Problem Ticket: 8179

Net Log: CNN, CSPAN 1 & 2 down.

CUSTOMER IMPACT OUTAGES WEEK ENDING 4/19/2013



Customer Impact Outage Criteria

SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Monday, April 15th 6:00AM – 1:00PM

Problem Type: Network **Net log Category:** Application

Problem Ticket: 8202

Net Log: Unable to access Asset Center/Asset Manager after Oracle password change this past weekend.

Tuesday, April 16th 4:05PM - 4:30PM

Problem Type: Network

Net log Category: Application

Problem Ticket: 8205

Net Log: GAOHQCITRIX1 server issue.

Wednesday, April 17th 9:40AM - Thursday, April 18th 3:15AM

Problem Type: Network **Net log Category:** Hardware **Problem Ticket: 8209**

Net Log: Chicago Field Office switch.

Wednesday, April 17th 4:08PM – 4:40PM

Problem Type: Network **Net log Category:** Application

Problem Ticket: 8217

Net Log: Problems accessing the GAOPORTAL1.

Wednesday, April 17th 6:08PM - 6:30PM

Problem Type: Network **Net log Category:** Application

Problem Ticket: 8218

Net Log: GAOHQCITRIX1 server issue, is running slow.

Thursday, April 18th 10:15AM – 10:19AM Problem Type: Network Net log Category: Application Problem Ticket: 8226

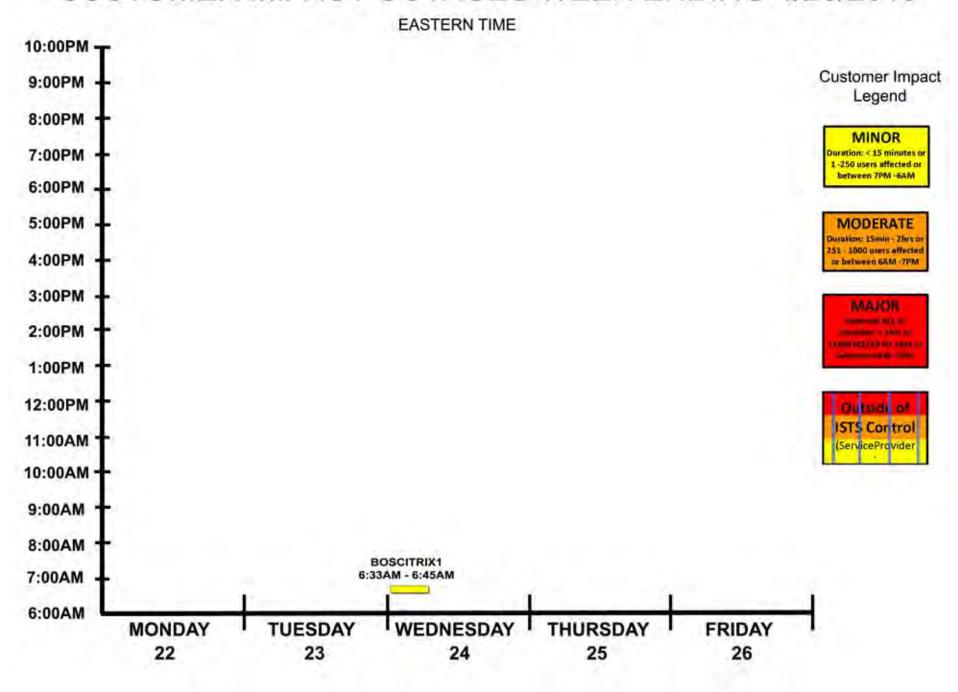
Net Log: One or more components of LA Printers – Web Management on server LARES01 are down.

Thursday, April 18th 12:23PM – 1:45PM Problem Type: Network

Net log Category: Application Problem Ticket: 8227

Net Log: Norfolk Power Outage.

CUSTOMER IMPACT OUTAGES WEEK ENDING 4/26/2013



Customer Impact Outage Criteria

SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

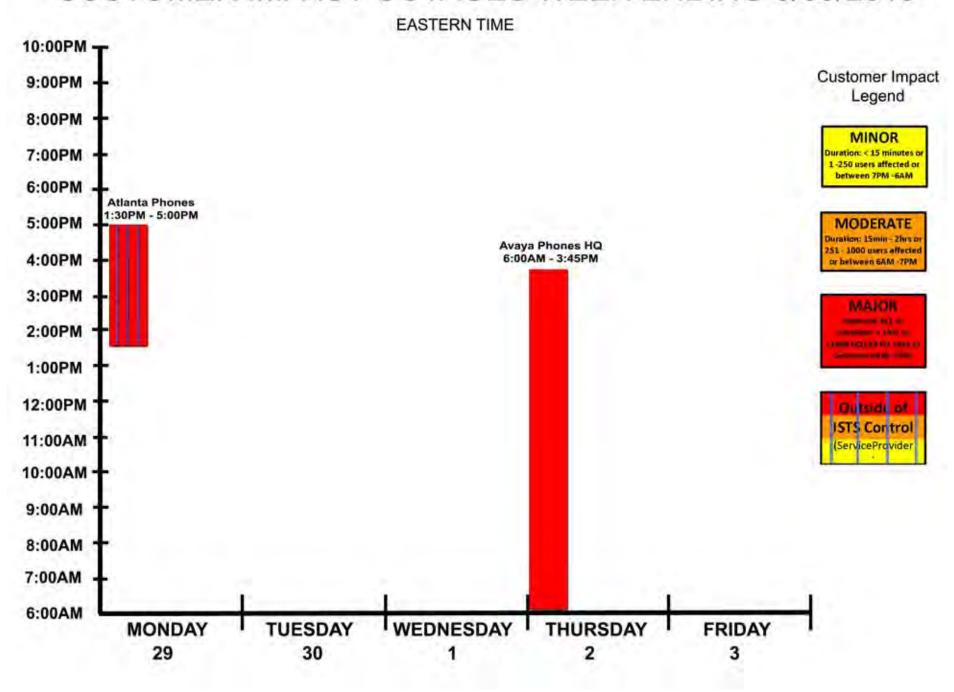
Wednesday, April 24th 6:33AM – 6:45AM Problem Type: Network

Net log Category: Application

Problem Ticket: 8256

Net Log: Boston Citrix server not responding.

CUSTOMER IMPACT OUTAGES WEEK ENDING 5/03/2013



<u>Customer Impact Outage Criteria</u>

SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Monday, April 29th 1:30PM – 5:00PM

Problem Type: Network
Net log Category: Application

Problem Ticket: 8284

Net Log: Atlanta phone issues (no incoming / outgoing calls).

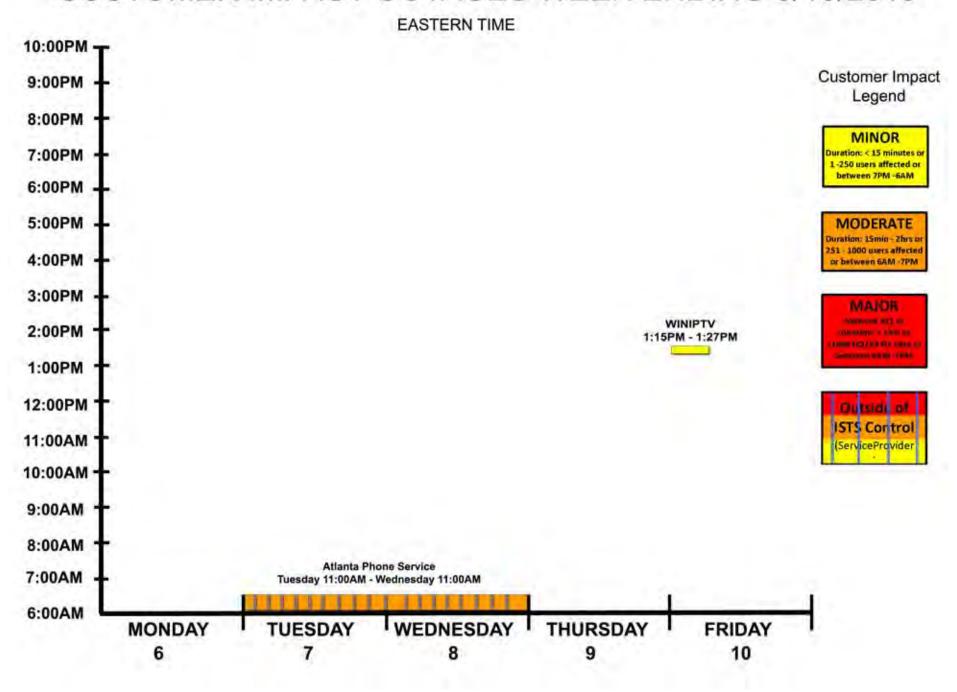
Thursday, May 2nd 6:00AM - 3:45PM

Problem Type: Network
Net log Category: Application

Problem Ticket: 8306

Net Log: Problems with AVAYA phones at HQ and Teleworkers.

CUSTOMER IMPACT OUTAGES WEEK ENDING 5/10/2013



<u>Customer Impact Outage Criteria</u>

SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

Tuesday, May 7th 11:00AM – Wednesday, May 8th 11:00AM

Problem Type: Network
Net log Category: Application

Problem Ticket: 8333

Net Log: Atlanta phone service – Toll free numbers not working.

Friday, May 10th 1:15PM - 1:27PM

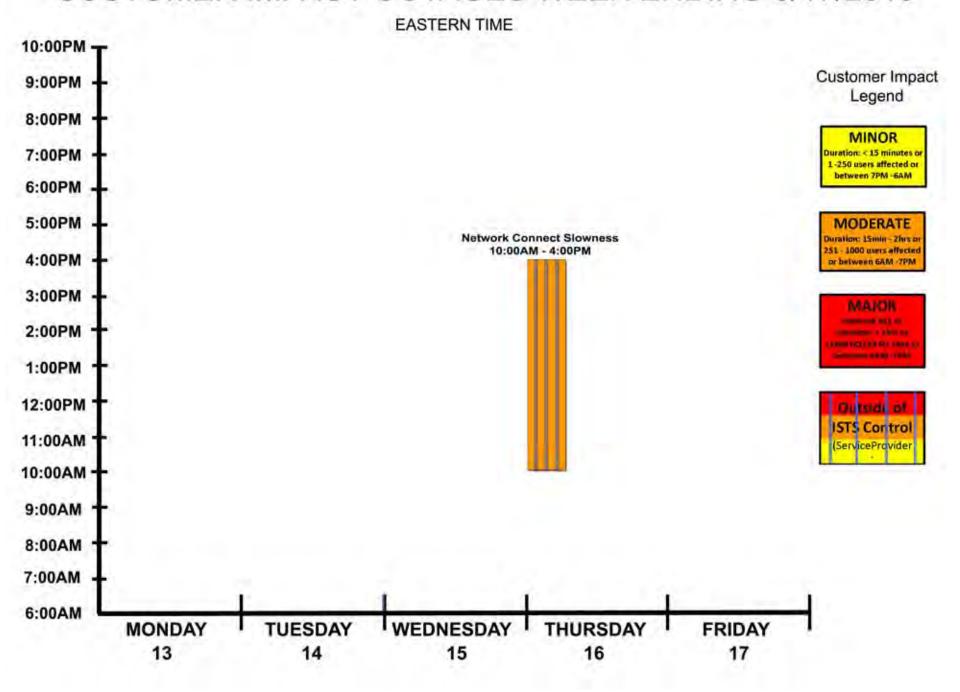
Problem Type: Network

Net log Category: Application

Problem Ticket: 8346

Net Log: WINIPTV server reboot.

CUSTOMER IMPACT OUTAGES WEEK ENDING 5/17/2013



<u>Customer Impact Outage Criteria</u>

SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.

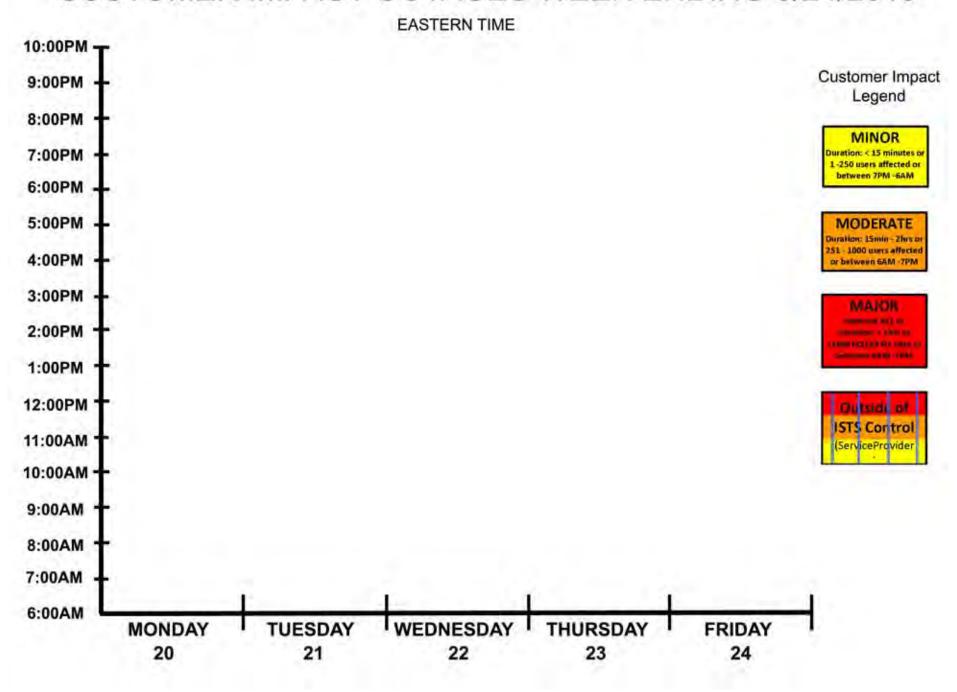
Thursday, May 16th 10:00AM – 4:00PM

Problem Type: Network
Net log Category: Application

Problem Ticket: 8376

Net Log: Network Connect extreme slowness.

CUSTOMER IMPACT OUTAGES WEEK ENDING 5/24/2013



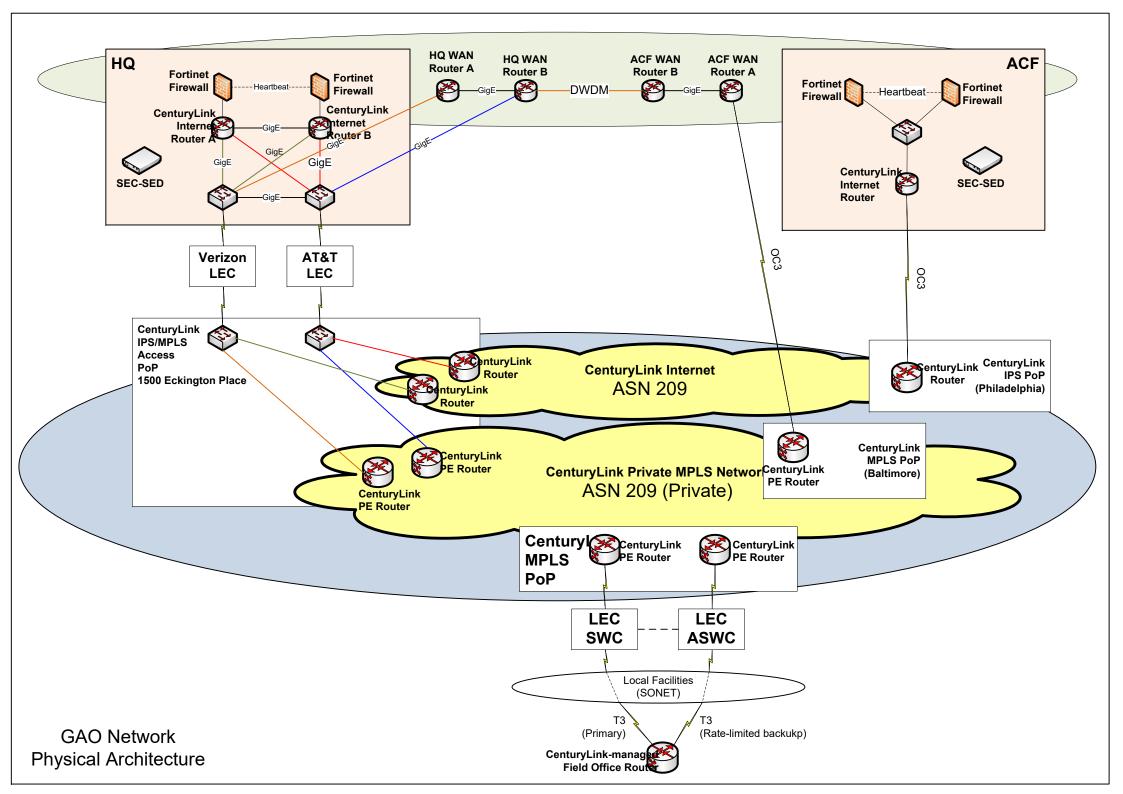
<u>Customer Impact Outage Criteria</u>

SCORE	Service Affected	<u>Duration</u>	# of Users Affected	Time of Day	<u>Impact</u>
1	Required	< 15 minutes	1 - 250 HQ / Single FO Site	7 pm - 6 am & Weekends	Delay
2	Essential	15 minutes - 2 hours	251 - 1000 HQ / Multiple FO Sites	6 - 7 am & 6 - 7 pm	Outage
3	Critical	> 2 hours	>1000 HQ / ALL FO Sites	7 am - 6 pm	Loss of Data

Required = all other applications and services

Essential = Web TA, Travel Manager, CCS, Printing

Critical = Login, DM, Internet, E-Mail, IP/TV (During CG Chat), Web T/A (On Last Friday/Monday of PP), CBPS during Key Rating Periods.



Settings	
MS Office	
Acrobat	
CS 6	1
Software	
Adobe Framemaker	
Adobe CS4	
Adobe CS6	
Acrobat	
Adobe Other Software	
OCR	
Other	
Preflight software	
Image Database Software	
CD creator software	
HardWare	
PCs	
Scanners	
Image Center Scanners	
Other hardware	5
Novell Delivered Groups	5
GAO Templates	6
Novell Delivered Apps (Publishing Staff)	6
Word Publishing Templates	
FrameMaker Publishing Templates	
InDesign Publishing Templates	
Novell Delivered Apps (GAO Staff)	10
Normal Template	
GAO Order template	11
GAO Workpapers	11
GAO Memos	
GAO HQ Letterhead	
GAO Field Letterhead	
GAO Products	
Powerpoint Templates	
Special Instructions	
Customized Products	14
Quicklook	15
Quicklook (NASA)	15
Quicklook (Homeland Security)	15
Red Book	

GAO logos	Other Publishing supported items	15
GAO signatures	9 11	
**	•	
**	_	
1 I VCCUUI C IVI DISH IDUHIIZ UDUALGADD LV UAO HCLWVI R	Procedure for Distributing update/app to GAO network	

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
<u>Settings</u>				
MS Office				
MS Word 2007			DM #4236428	
Excel Options			DM #4596588	
PowerPoint options			DM #4596591	
Access Options			DM #4596573	
Acrobat				
Acrobat 10			DM #5594251	
Acrobat 9			DM #3956777	
CS 6				
Photoshop			DM #3344931	
Illustrator			DM #3344265	
InDesign			DM #3344932	
<u>Software</u>				
Adobe Framemaker				
Adobe Framemaker 7.0p579	Novell		Documentation: DM #3285417	Template location:
(Documentation on use)	delivered			U:\FrameMaker Templates
Framescript v2.1r3	Novell			
(need to update to Framescript 4 or 5to use Framemaker 8)	delivered (packaged with Frame Install)			
Adobe CS4			Installation Instructions	
			DM #3594140	
Adobe InDesign CS4 6.0.6				
Adobe Photoshop CS4 11.0.2				
Adobe Illustrator CS4 14.0.0				
Adobe CS6			Installation Instructions: DM #5941273	
			Installation Checklist: DM #5972670	
Adobe Indesign CS6	Novell delivered		Documentation: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Settings\InDesign	
			DM #3344932 CS 6 settings-swatch locations- Al RGB doc profile location-Al	

5/2/2013 GAOHQ-3344935 Page 1

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
			Bar and chart templates location GAOHQ-6093255	
Adobe Photoshop CS6	Novell delivered		Documentation: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Settings\Photoshop DM #3344931	
			CS 6 settings-swatch locations- Al RGB doc profile location-Al Bar and chart templates location GAOHQ-6093255	
Adobe Illustrator CS6	Novell delivered		Documentation: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Settings\Illustrator DM #3344931	
			CS 6 settings-swatch locations- Al RGB doc profile location-Al Bar and chart templates location GAOHQ-6093255	
Adobe Web / Design Premium Suite	Novell delivered		GAOHQ-6093255	
GAO color palette and swatches	Novell delivered		Documentation: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Settings\GAO color palettes GAOHQ-6093255 DM #3464545	
GAO Color Settings	Novell delivered		Documentation: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Settings\GAO CS color settings GAOHQ-6093255	
Manual install Instructions for CS6 apps	Manual		See documentation on supportin GAO Publishing Secure PCs U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Settings\GAO Pub Secure PC Files	
Adobe CS6 eLearning Suite	Manual Install In use by Learning Center only (suite includes Flash, PS Extended, Captivate,			

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
	Bridge,			
	Presenter, Soundbooth)			
	- Coundbootin			
Acrobat				
Acrobat 9.5.4	GAO 2007		Documentation: U:\Graphic	
	image &		Help	
	network		Desk\Private\LIBRARY\Projects	
	distribution of patches		\GAO Settings\Acrobat	
	pateries		GAO Acrobat Settings GAOHQ-3956777	
Adobe PDFMaker	Image		Same as above	
Adobe Acrobat Distiller	Image		Same as above	
Adobe Other Software				
Adobe Live Cycle	Novell			
	delivered			
Adobe Captivate				
Adobe Camera Raw	Novell			
	Delivered w/			
	photoshop			
Adobe Lightroom 2	Manual Install			
Adobe Lightroom 3	Manual Install			
OCR				
OmniPage Pro 17.0	Manual Install		(need install disk for 14 to install 17)	
			DM #3738865	
Adobe Acrobat OCR functionality				
Other				
JavaScript	For InDesign		U:\Graphic Help	
			Desk\Private\Katie\Scripts	
RoboHelp	Not Used		?	
Delta Graph	Not Used			
CommonLook Office 2.1	Testing			
CommonLook PDF	Testing			
Preflight software				
Enfocus Pitstop (9.0) with	Manual Install		Documentation:	
Acrobat 9			U:\Graphic Help Desk\Guidance & Tips\PitStop	
			DM #3594140	

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
Image Database	Manual Install		SOP <u>GAOHQ-#6174295</u>	
Software				
			00B GLOVIO "5171050	
CD creator software	Manual Install		SOP <u>GAOHQ-#6174260</u>	
Monitor calibration software	Manual Install			
Pantone ColorVision Spyder2Pro 1.x				
Pantone Color Vision (DoctorPro2.x)				
Nik Color Efex Pro 2.0 SE				
Pantone Colorist				
Typhoon AutoRun 3.2	Manual Install		SOP <u>GAOHQ-#6174260</u>	
Teleport Pro 1.4.4.0.0	Manual Install		SOP <u>GAOHQ-#6174260</u>	
SureThing Labeler Deluxe 4	Manual Install		SOP <u>GAOHQ-#6174260</u>	
PrimoDVD 2.1	Manual Install		SOP <u>GAOHQ-#6174260</u>	
Axialis Icon Workshop 6.0	Manual Install		SOP <u>GAOHQ-#6174260</u>	
Adobe Premier Pro 1.5	Manual Install			
Adobe After Effects 6.5	Manual Install			
Adobe Audition/Loopology 1.5	Manual Install			
<u>HardWare</u>				
PCs				
GAO HP6910				
GAO HP6930				
GAO HP 6200 tower				
GAO HP 4600 tower				
GAO HP z400				
GAO Secure Room PCs Publishing dedicated				
Video editing PCs (non GAO image)	Manual installs of CS apps			
Scanners				
Epson WorkForce GT1500	Manual install		U:\Graphic Help Desk\Private\LIBRARY\Support	f\
Epson 1640			U:\Graphic Help	

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
			Desk\Private\LIBRARY\Support\ hardware\scanners\epson	
Epson 1650			U:\Graphic Help Desk\Private\LIBRARY\Support\ hardware\scanners\epson	
Epson 1670			U:\Graphic Help Desk\Private\LIBRARY\Support\ hardware\scanners\epson	
Epson 4490			U:\Graphic Help Desk\Private\LIBRARY\Support\ hardware\scanners\epson	
Image Center Scanners				
Fujitsu 6800	Install OmniPage 14, later versions don't support Fujitsu's proprietary driver		DM #3738865	
Fujitsu 6750	Install OmniPage 14, later versions don't support Fujitsu's proprietary driver		DM #3738865	
Other hardware				
Monitor calibration equipment Pantone ColorVision Spyder2Pro OPTIX ^{xr} Monaco by X-Rite HP Colorimeter (gretagmacbeth)	Manual install			
GAO Photolab equipment Fuji PG3500 printer Nikon supercool Is8000 scanner				
Image Databases				
CD Printer				
Novell Delivered			CS4: <u>DM #3594140</u> CS6:	
Groups				
Adobe Graphics Group	fonts			
Adobe Composition Group	(FrameMaker 7.0p579 &			

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
	fonts & MS Word Report Template & GAO Blank & Ordering Information.do cx)			
GAO Templates				
Novell Delivered Apps (Publishing Staff)				
Word Publishing Templates				
GAO Report Template 5.5.2	Novell delivered	4/24/13	Source files: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\01-GAO Rpt Temp Guidance: DM #3285454	C:\Program Files\Microsoft Office\Templates
GAO Blank.dotm	Novell delivered	2/2/12	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\01-GAO Rpt Temp\5-5-2\Blank dot	C:\Program Files\Microsoft Office\Templates
Ordering Information docx	Novell delivered	10/9/12	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\01-GAO Rpt Temp\Ordering Information	C:/
Copyright one third offset page.pdf		7/14/11	U:\Work in Process\Publishing\Publishing PDF Inserts	
Copyright centered.pdf		7/14/11	U:\Work in Process\Publishing\Publishing PDF Inserts	
Ordering Information_Reports.pdf		1/30/12	U:\Work in Process\Publishing\Publishing PDF Inserts	
Ordering Information_testimony&corres pondence.pdf		1/30/12	U:\Work in Process\Publishing\Publishing PDF Inserts	
Directives.dot	(Not used)		U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\07-GAO Order\01-Directives	

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	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
FrameMaker Publishing	Steve Babb		U:\Graphic Help	U:\FrameMaker Templates
Templates GAO Frame Report Template			Desk\Private\LIBRARY\Projects \GAO Templates\08-FrameMaker	
			Covers in FrameMaker GAOHQ-2876290.DOC.DRF	
			GAOHQ-#6178831-ADOBE FRAMEMAKER TYPESETTING PROCEDURES FOR GAO - USING FRAMEMAKER TO LAYOUT A REPORT	
autotext.fm	Novell delivered	6/16/03		
BackCovers.fm		7/7/04		
Blue Book.book		6/9/03		
BookTemplate.book		8/19/11		
BookTemplateLOF.fm		8/31/10		
BookTemplateLOT.fm		8/31/10		
BookTemplateTOC.fm		8/31/10		
copyright_notice.fm		5/11/11		
Covers.fm		7/13/12		
DigitalColorCovers.fm		7/13/12		
GAO Main Template.fm		1/30/12		
gao_autotext.fm		11/18/02		
letter.css		7/31/06		
letter.fm		9/20/05		
letter.xml		7/31/06		
New Adobe FrameMaker Document.fm		6/10/08		
Spines.fm		6/17/03		
Table of Contents.fm		11/7/03		
6x9				U:\FrameMaker Templates\6x9
6x9.book		11/18/02		
BackCovers.fm		6/29/09		
copyright_notice_6x9.fm		5/11/11		
Covers.fm		6/17/11		
GAO Main Template.fm		1/30/12		
Spines.fm		11/18/02		
Table of Contents.fm		7/7/04		

5/2/2013 GAOHQ-3344935 Page 7

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
Classified				U:\FrameMaker Templates\Classified
BackCovers.fm		6/25/03		
Classified.book		6/9/03		
Covers.fm		6/16/03		
GAO Main Template.fm		6/17/03		
Table of Contents.fm		6/25/03		
color_covers				U:\FrameMaker Templates\color_covers
GAO Blue - Pantone 286.eps		1/14/05		
GAO Brown - Pantone 161.eps		5/10/02		
GAO Custom - Pantone 466.eps		6/7/02		
GAO Cyan - 100.eps		8/5/04		
GAO Gray - 15%.eps		6/30/09		
GAO Green - Pantone 309.eps		5/10/02		
GAO Red - Pantone 187.eps		6/7/02		
GAO White.eps		6/19/02		
GAO Yellow - Pantone 102.eps		5/10/02		
other colors				U:\FrameMaker Templates\color_covers\othe colors
GAO Brown - Pantone 161.eps		5/10/02		
GAO Custom - Pantone 466.eps		6/7/02		
GAO Cyan - 100.eps		8/5/04		
GAO Green - Pantone 309.eps		5/10/02		
GAO Mustard - Pantone 131.eps		5/10/02		
GAO Red - Pantone 187.eps		6/7/02		
GAO Salmon - Pantone 158.eps		5/10/02		
GAO Yellow - Pantone 102.eps		5/10/02		
colors				U:\FrameMaker Templates\colors
online.fm		6/9/03		
print.fm		6/9/03		

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
FrameScripts			U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\08- FrameMaker\03-FrameScripts Uncompiled	U:\FrameMaker Templates\FrameScripts
			U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\08- FrameMaker\FY2008 FrameScript Buy	
2003-05-13-PrepareForAscii.fso		6/13/03		
ApplySSI.fso		8/5/05		
ApplyTemplateAndPrint.fso		7/17/03		
ASCII Footer.txt		7/26/04		
ASCII Header.txt		7/26/04		
ChangeValues.fso		6/13/03		
classified_markings.fso		6/13/03		
CleanupFromWord.fso		6/13/03		
ColorCovers.fso		7/27/09		
CoverTitle.fso		7/7/04		
CreateCover.fso		6/13/05		
DropCaps.fso		6/13/03		
GAO_Scripts.fso		10/1/04		
GAO_Templates.fso		6/13/03		
GAOScriptsInstaller.fsl		7/16/09		
HTML_SurveyCleaner.fso		6/17/03		
InsertCommentsSlides.fso		6/13/03		
InsertHypertextMarkers.fso		3/17/11		
PrepareForAscii.fsl		4/20/12		
PrepareForAscii.fso		4/23/12		
Quick Look.fsl	-	3/28/12		
RemoveFootnoteNumbers.fso		6/13/03		
ResetGAOScripts.fsl		6/13/03		
ResetGAOScripts.fso		6/13/03		
SetBookPagination.fso		6/13/03		
SetGaoPaths.fsl		4/23/12		
SetVariables.fso		9/23/03		
SetWatermarks.fso		6/13/03		
TableCleaner.fso	-	6/13/03		
TocBuilder.fso		6/25/03		
TocPageNumbers.fso		6/13/03		
WriteAscii.fso		9/16/03		

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
<u>Permissions</u>				U:\FrameMaker Templates\FrameScripts\Permis sions
AndersonB.fsl	No other permission id is used at GAO	6/24/04		
GAOScriptsInstaller.fsl		7/17/03		
path_developer.fsl		7/1/02		
path_tester.fsl		5/21/02		
path_user.fsl		4/23/02		
tester.fsl		11/19/02		
Graphic Examples	Not used			U:\FrameMaker Templates\Graphic Examples
Month in Review	Not used			U:\FrameMaker Templates\Month in Review
Procedures	Not Used			U:\FrameMaker Templates\Procedures
Programs	Not Used			U:\FrameMaker Templates\Programs
InDesign Publishing Templates	Manual Install		U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\00-GAO ID Rpt Temp	
			Creating GAO Reports in InDesign CS4 DM #4074320	
			InDesign CS4 Automation Checklist DM #4088186	
			Creating Rollovers in InDesign DM #4551810	
			GAO Guidelines for Publishing Interactive Graphics DM #4935631	
Novell Delivered Apps (GAO Staff)				
Normal Template				
GAO Normal Dotm	Novell delivered	5/23/2012	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\03-Normal_dot	C:\Program Files\Microsoft Office\Templates
			documentation: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\03-	

5/2/2013 GAOHQ-3344935 Page 10

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
			Normal_dot\documentation	
GAO Order template				
GAO Order.dotm	Novell delivered	7/13/12	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\07-GAO Order	C:\Program Files\Microsoft Office\Templates
GAO Workpapers				
Other Record.dotx	Novell delivered	1/31/13	Archive U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC-plcg	C:\Program Files\Microsoft Office\Templates\GAO Workpapers
Record of Analysis.dotx	Novell delivered	1/31/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC-plcg	C:\Program Files\Microsoft Office\Templates\GAO Workpapers
Record of Document.dotx	Novell delivered	1/31/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC-plcg	C:\Program Files\Microsoft Office\Templates\GAO Workpapers
Record of Inspection_Observation.dotx	Novell delivered	1/31/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC-plcg	C:\Program Files\Microsoft Office\Templates\GAO Workpapers
Record of Summary.dotx	Novell delivered	1/31/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC-plcg	C:\Program Files\Microsoft Office\Templates\GAO Workpapers
Workpaper Review Comment Sheet.dotx	Novell delivered	5/31/12	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC-plcg	C:\Program Files\Microsoft Office\Templates\GAO Workpapers
GAO Memos				
GAO memo.dotx	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Memos	C:\Program Files\Microsoft Office\Templates\GAO Memos
Press Contact Memo.dotx	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Memos	C:\Program Files\Microsoft Office\Templates\GAO Memos
GAO HQ Letterhead				
GAO Headquarters.dotx	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC-	C:\Program Files\Microsoft Office\Templates\GAO HQ Letterhead

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
			plcg\GAO HQ Letterhead	
Chief Operating Officer.dotx	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO HQ Letterhead	C:\Program Files\Microsoft Office\Templates\GAO HQ Letterhead
Comptroller General.dotx	Novell delivered	4/8/2013	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO HQ Letterhead	C:\Program Files\Microsoft Office\Templates\GAO HQ Letterhead
Enclosure.dotx	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO HQ Letterhead	C:\Program Files\Microsoft Office\Templates\GAO HQ Letterhead
Personnel Appeals Board.dotx	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO HQ Letterhead	C:\Program Files\Microsoft Office\Templates\GAO HQ Letterhead
GAO Field Letterhead				
Atlanta.dotx	Novel delivered	4/8/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
Boston.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
Chicago.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
Dallas.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
Dayton.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead

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	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
			Letterhead\2007	
Denver.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
Huntsville.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
Los Angles.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
Norfolk.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
San Francisco.dotx	Novel delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Memo- Letter-work-prod-OGC- plcg\GAO Field Letterhead\2007	C:\Program Files\Microsoft Office\Templates\GAO Field Letterhead
Seattle.dotx		4/4/13		
GAO Products				
GAO Highlights Template V3-5	Novell delivered	4/4/13	Source files: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\02-Highlights Guidance: DM# 3887100	C:\Program Files\Microsoft Office\Templates\GAO Products
SSI Highlights Template	Novell delivered	4/4/13	Documentation: U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\02- Highlights\Highlights_v3- 4\Highlights SSI	C:\Program Files\Microsoft Office\Templates\GAO Products
GAO Vertical Brief.dotm	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\05-Vertical Briefing Template	C:\Program Files\Microsoft Office\Templates\GAO Products

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
Draft Report Cover.dotm	Novell delivered	3/25/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\01-Cover templates	C:\Program Files\Microsoft Office\Templates\GAO Products
QR-Testimony Cover.dotx		3/25/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\01-Cover templates	C:\Program Files\Microsoft Office\Templates\GAO Products
Testimony Cover.dotx	Novell delivered	4/5/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\01-Cover templates	C:\Program Files\Microsoft Office\Templates\GAO Products
IT Briefing Template.dotm	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO IT Briefing Template	C:\Program Files\Microsoft Office\Templates\GAO Products
GAO Simple.dotm	Novell delivered	8/15/12	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\GAO Simple	C:\Program Files\Microsoft Office\Templates\GAO Products
Powerpoint Templates				
GAO_Combined_Templates.pot m	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\06-GAO PowerPoint Templates	C:\Program Files\Microsoft Office\Templates\GAO Presentation Designs
GAO_Combined_Template_200 7.ppam	Novell delivered	5/24/12	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\06-GAO PowerPoint Templates\Add- ins\2007 Native	C:\Documents and Settings\Babbs\Application Data\Microsoft\AddIns
Maps.pptx	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\06-GAO PowerPoint Templates\Maps - Copyright	C:/
Copyright.pptx	Novell delivered	4/4/13	U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Templates\06-GAO PowerPoint Templates\Maps - Copyright	C:/
Special Instructions				
Framemaker 7.0v579	Moving off of Frame 7 requires move from framescrpt 2.1			

Customized Products

to 5.2

	Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
Quicklook	Adobe FrameMaker template & Framescript & Oracle database integration		DM #2922011 U:\Graphic Help Desk\Private\LIBRARY\Projects \07-Special Projects\Quicklook	
Quicklook (NASA)	Adobe InDesign template			
Quicklook (Homeland Security)	Adobe InDesign template		Quicklook (Homeland Security) InDesign Template DM #3945000	
Red Book	Adobe FrameMaker template & Framemaker & indexing		U:\Graphic Help Desk\Private\LIBRARY\Projects \07-Special Projects\RedBook3ed	
P & A	InDesign/InCo py		Instructions for Combining Forms: P&A DM #3340384	
FAM	Word		U:\Graphic Help Desk\Private\Steve\04-Special Projects\2007\FAM	
Yellowbook	Html generated from Frame		U:\Graphic Help Desk\Private\LIBRARY\Projects \07-Special Projects\2012 yellow book	
Other Publishing supported items				
GAO logos			U:\Graphics Library GAO Wide Use\GAO LOGO & SEAL\GAO Logo U:\Graphic Help Desk\Private\LIBRARY\Projects \GAO Logo_New	
GAO signatures			U:\Work in Process\Publishing\signatures	
Other Supported				
Environments				
Citrix / Remote Access	Word Normal Template			
	Word Highlights			

Notes	File Date	Documentation & Template archive location	Template location on GAO PCs
Template			
Word Report Template			
GAO Standard Templates			
Word Settings	i		
Acrobat			
Fonts			

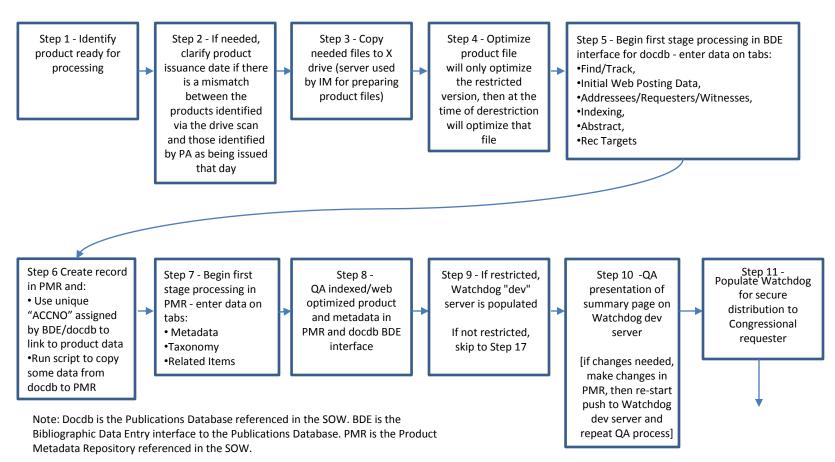
Procedure for Distributing update/app to GAO network

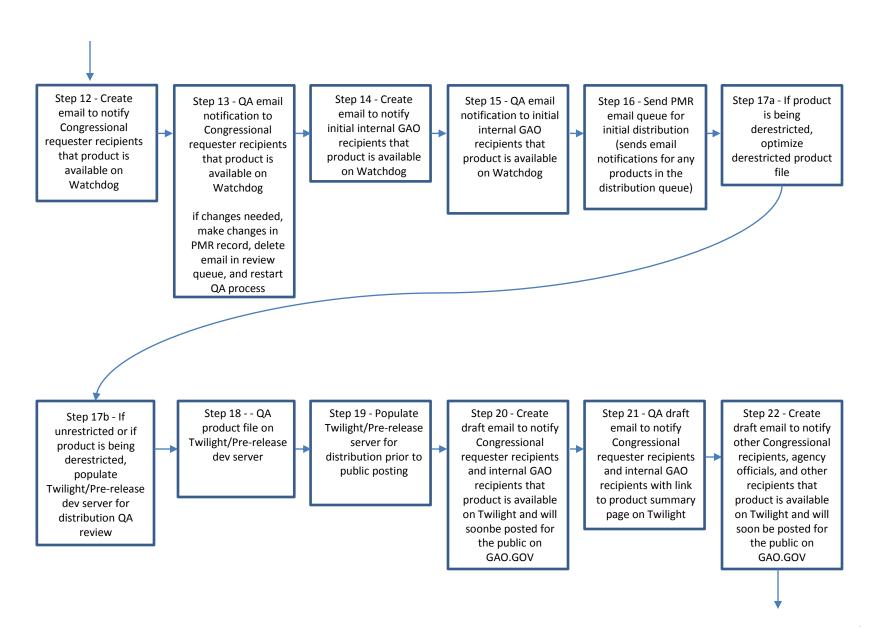
SCR -

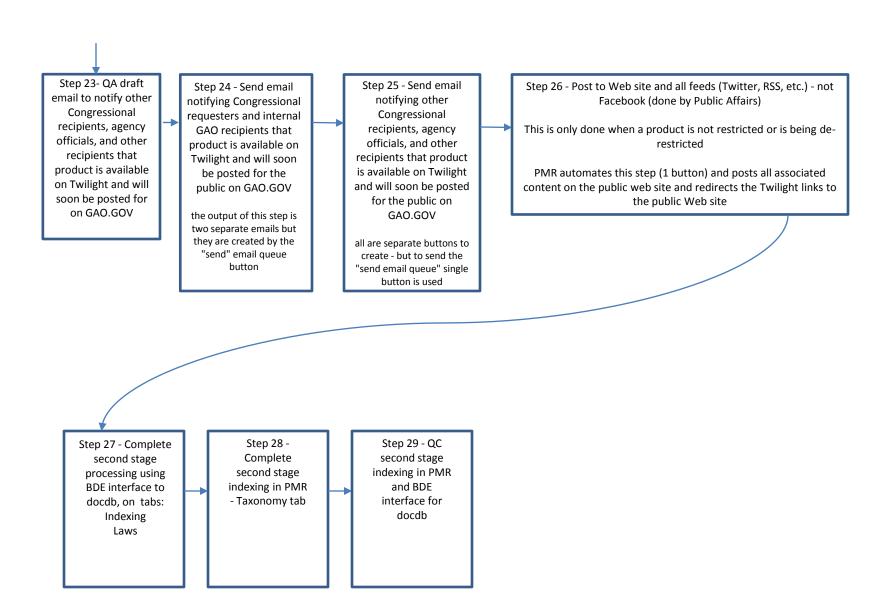
CAB Meetings:

QA Pass Notification – Need notification from Lil Fauntroy announcing the passing of the tested object.

Report Processing Workflow Example Performed by Information Management







PRODUCT: Bid Protest Decisions

	Product Information				Dissemination		Web Listing				Email Listing	
Document Type	Issuing Unit	Product Type	Product Number	Restriction Status	Distribution Process	Web Posting Deadline	RIP	Separate Webpage	Topic Collections	"Reports and Testimonies"	Daily Listserv	Month in Review
Bid Protest Decisions	GC	Legal	B-######	N/A	N/A	Day of receipt of final PDF (by 11 AM)	✓	✓	N/A	N/A	Decisions	N/A

Description

The Comptroller General, head of the Government Accountability Office, issues legal decisions and legal opinions on appropriations law, bid protests, and other issues of federal law. The Office of General Counsel is the GAO office responsible for carrying out these functions and issuing decisions, opinions, and reports.

Bid Protest Decision: GAO provides a forum for bidders and offerors seeking federal government contracts who believe that contracts have been, or are about to be, awarded in violation of the laws and regulations that govern contracting with the federal government. A bidder or offeror can file a bid protest with GAO, and GAO issues a decision on whether the federal agency has complied with statutes and regulations controlling government procurement.

Business Rules

Owner: General Counsel (GC)

Final PDF Receipt Deadline: 11:00 AM

To process the product, the final PDF version must have a "Digest" and must not have the "Protected, don't process" stamp on it. If the PDF has the "Protected, don't process" stamp, notify GC.

Separate Webpage Listing: http://www.gao.gov/legal/bids/browserecent.html

Posting Timeframe: See instructions below:

??

Technical Information

Final PDF File Location (where the ISTS EPS places the final file for posting): U:\Web Posting\Gen_Counsel\Bid_Protests **Coding:**

• Server Location: ??

Database Elements

The list below contains information on what to enter into each data field of both the BDE and PMR records.

For details on the BDE and PMR applications, each data field, and the source for the data fields, please refer to the following documents:

- For the BDE details: GOAL4 NETOPS-#138864-IMPD INFORMATION MANAGEMENT SOP FINAL (version 12, DM# 138864)
- For the PMR details: <u>GAOHQ-#5458243-GAO IMPD INFORMATION MANAGEMENT STANDARD OPERATING PROCEDURES</u> (version 2, DM# <u>5458243</u>)

BDE Record:

Find/Track Tab

- Report Number: N/A
- B-Number: From PDF
- Job Code: N/A
- <u>Title</u>: text after Matter of: line (from PDF)
- Daybook Date: Date of entry into BDE
- Final Hard Copy Receipt Date: Date of entry into BDE

Initial Web Posting Data Tab

- Restriction Status: Unrestricted
- <u>Document Issue Date</u>: Date at the top of the document (from PDF)
- Actual Release Date: Date of public release
- <u>Document Type</u>: D (Decision)
- Broad Subject Heading: Decisions and Opinions
- Strategic Goal: N/A
- GAO Team: Office of the General Counsel

Addressees/Req./Witnesses Tab

- Addressees/Requestors: Organizations from the Matter of line
- Witness: GAO GC employee who signed the on last page of PDF

Indexing Tab

- <u>Director/Asst. Director</u>: N/A
- Engagement Source: N/A
- <u>Pagination</u>: Enter the following numbers (from PDF):
 - Total number of pages
 - Byte size: from PDF properties.
 - Number of pages in body
- Orgs Concerned: As appropriate per the text of the product
- <u>Subject Terms</u>: As appropriate per the text of the product
- Identifiers: N/A
- Descriptive. Notes: N/A
- Contributors: N/A

Laws Tab

• <u>Laws</u>: As appropriate per the text of the product

Abstract Tab

• Background: Text of the first paragraph of the document (directly under the subject line) that explains the protest

 <u>Findings</u>: Text that states GAO's decision (acceptance or denial of the protest); usually the decision statement is at the very end of document before signature block

PMR Record:

Product Type: Decisions

Metadata Tab

- Release Date (Summary Pg): Date at the top of the document (from PDF)
- <u>Issue Date (RIP box date)</u>: Date of public release
- Added Date: Date of entry into PMR
- <u>Document Type</u>: Bid Protest Decision
- <u>Requestor/Addressee</u>: Persons and organizations listed in the **Matter of** line at beginning of document (from PDF); No requestors.
- Witness: GAO GC employee who signed the product
 - o If available, add co-signer as Witness 2
- Strategic Goal 1: N/A
- Strategic Goal 2: N/A
- Number of Pages: Total number of pages of the PDF
- Color Pages: N/A
- Director: GAO GC employee who signed the product
- Director Email: Email address of GAO GC signer (from GAO Phonebook)
- <u>Director Phone</u>: Phone number of GAO GC employee who signed the document (from GAO Phonebook)
- <u>Director Two</u>: Second GC signer if available
- <u>Director Two Email</u>: Email address of second GC signer if available (from GAO Phonebook)
- <u>Director Two Phone</u>: Phone number of second GC signer if available (from GAO Phonebook)
- Assistant Director: N/A
- Assistant Director Email: N/A
- Jobcode: N/A

- Engagement Source: N/A
- <u>Programming Team 1</u>: Office of the General Counsel
- Investing Team(s): N/A
- Joint Team(s): N/A
- <u>Description</u>: First and second paragraph of product (from PDF)
- Contributor(s): N/A
- Restricted Days: N/A
- Supplementary Urls 1: N/A

Taxonomy Tab

Using Add to this set field, add the necessary data for the following sections:

- PROD Thesaurus: As appropriate per the text of the product
- PROD Concept Extraction Laws: As appropriate per the text of the product
- PROD Concept Extraction Agency: As appropriate per the text of the product
- PROD Concept Extraction Programs: N/A
- PROD Concept Extraction People: N/A
- PROD Concept Extraction Place: N/A
- PROD_Topic_Taxonomy: GAO high-level Topic keyword appropriate per the text of the product
- PROD_Agency_Taxonomy: As appropriate per the text of the product
- PROD Collection: N/A

Related Items Tab

- Upload PDF-version of the product as a child of the parent PMR record
- Upload HTML Web Section as of the product as a child of the parent PMR record
 - For details on creating the HTML section, see section 4.2 of the <u>GAOHQ-#5458064-GAO IMPD WEB OPERATIONS STANDARD OPERATING PROCEDURES</u>.

Workflow Tab

Click "Submit for approval."

• Approver will review record, and approve it from the Dashboard's Approval Alert queue

Distribution Tab

WWW Distribution: Legal products are distributed to the public website through the distribution channel buttons in the Distribution Tab. The [DEV] buttons push the PMR record to the development instances of the channels for QA review prior to pushing to the production [PROD] instances.

- Click the **Run** button for the **Push to WWW [DEV]** button to make the record appear on **www-dev.gao.gov**.
- Click the Run button for the Push to WWW [PROD] "Run" button to make the record appear on www.gao.gov.

QA Process

The Information Management Team will follow the defined QA Process for all GAO Product Types that they are responsible for posting. Every week there will be two IM Team members assigned to the QA function. Below is the step-by-step process to be followed:

- Once indexing is completed for the product, the Indexer will be the first QA reviewer.
- He or she will print out the relevant QA Product Checklist. This checklist will be used by all 3 QA reviewers.
- Once the Indexer has completed QA on their own work, they will make an assignment in the ITSM ticket to QA Reviewer 1
 and QA Reviewer 2. They will turn over the QA Product Checklist to QA Reviewer 1 who will then turn it over to QA Reviewer
 2 for their review. The QA Product Checklist will be kept in a separate binder for daily review by SRA Management.
- QA Reviewer 1 will perform QA on the product type. They will use the documented QA Checklist that has been developed for each product type. Each QA line in the checklist will be verified with a checkmark and will be initialed by the Indexer, QA Reviewer 1 and QA Reviewer 2.
- In the event that any errors are discovered, these will be documented in the Comments section of the QA Checklist and will be sent back to the Indexer for correction.
- After correction(s) have been made, the QA process starts over from the beginning.
- Once QA is completed, the Indexer will be responsible for distributing the product.

BID PROTEST DECISION - QA Check List

r			
Comments:			

BDE Record

Record Tab	Fields to QA	Verified (√)	Initials
	B-Number		
	Job Code		
Find/Track Tab	Title		
Find/Track Tab	Daybook Date		
	Form 115 Receipt Date		
	Final Hard Copy Receipt Date		
	Restriction Status		
	Document Issue Date		
luitial Wab Doction Tab	Document Type		
Initial Web Posting Tab	Broad Subject Heading		
	Strategic Goal		
	GAO Team		

Record Tab	Fields to QA Verified (✓)		Initials
	Addressees		
Req/Addressees/Witness Tab	Requestors		
	Witness		
	Director		
	Asst. Director		
	Engagement Source		
la devien Teb	Pagination		
Indexing Tab	Orgs Concerned		
	Subject Terms		
	Identifiers		
	Contributors		
Laws Tab	Laws		
Abatract Tab	Background		
Abstract Tab	Findings		

PMR Record

	Fields to QA	Verified (✓)) Initials	
	Document Type			
	Issue Date (RIP box date)			
	Release Date (Summary Pg)			
	Added Date			
Metadata Tab	Witness			
	Number of Pages			
	Color Pages			
	Team 1			
	Description			
	PROD_Concept_Extraction_Laws			
	PROD_Concept_Extraction_Agency			
	PROD_Concept_Extraction_Programs			
Taxonomy Tab	PROD_Concept_Extraction_People			
Taxonomy Tab	PROD_Concept_Extraction_Place			
	PROD_Topic_Taxonomy			
	PROD_Agency_Taxonomy			
	PROD_Collection			

	Fields to QA	Ve	rified (✓	()	Initials	
	Product PDF File: Link Label					
Related Items Tab	Product PDF File: File Type					

PRODUCT: Testimony

	Product Information			Dissemination		Web Listing				Email Listing		
Document Type	Issuing Unit	Product Type	Product Number	Restriction Status	Distribution Process	Web Posting Deadline	RIP	Separate Webpage	Topic Collections	"Reports and Testimonies"	Daily Listserv	Month in Review
Testimony	Mission	Audit	GAO-FY-###	√	√	Time of hearing (per notification)	√	N/A	√	✓	Daybook	✓
Statement of Record	Mission	Audit	GAO-FY-###T or GAO-FY-###	✓	✓	Time of hearing (per notification)	√	N/A	✓	√	Daybook	1

Description

"Presents the results of GAO work before congressional committees, commissions, or other entities." (EAGLE).

"GAO frequently testifies at congressional committee hearings on the results of completed or ongoing GAO work. For each hearing, GAO typically prepares a formal written statement that is submitted to the committee a day or two in advance. GAO publishes its written statement on the day of the hearing. At the hearing, a GAO witness delivers a 5- to 10-minute oral summary of the statement's main points."

(Words@Work Testimony Page: http://intranet.gao.gov/words_at_work/gao_products/primary_products/testimony)

Other testimony formats: A shorter written statement may sometimes be prepared in place of a standard statement. In addition, a "statement for the record" may be prepared when GAO does not appear as a witness at a hearing but is asked to submit a statement for inclusion in the hearing's record. (Words@Work Testimony Page)

Business Rules

Owner: Mission Team that produced the product

Posting Timeframe: See instructions below:

Timing is important for GAO web posting.

Products placed in the U: drive Web Posting folder by the ISTS EPS publishing staff prior to noon on the day of issuance will be included in the publishing Daybook listserv notifications and posted to the website generally between 2 p.m. and 3 p.m.

- Products not received by noon will be included in the publishing notifications (e.g., Daybook listserv and RSS feed) and posted to the website the next day.
- Testimony products are not distributed.
- If coordinated with Congressional Relations and Public Affairs, testimonies may be posted "out-of-cycle" shortly after the start of the hearing presentation by the witness
- Depending on the quantity of products to be posted on any day, publishing notifications and web posting may occur later than 3 p.m.
- If products are posted to the web prior to the normal Daybook distribution, publishing notifications are sent to the public and media as usual.

NOTE: Web posting may be delayed during periods of high production or where a product is received late in the day. Please contact Information Management about timing.

(Text based on Distributing and Publishing GAO Products instructions located at http://intranet.gao.gov/services/publishing and multimedia/product issuance/distributing gao products)

Restriction Status

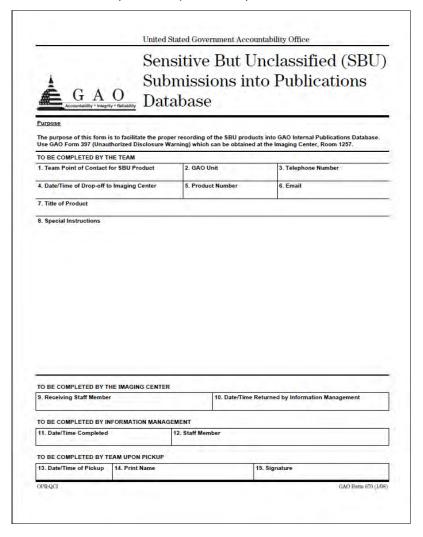
Testimonies are unrestricted; Sensitive But Unclassified (SBU); or Non-Internet (NI) products.

- Unrestricted Products: Unrestricted testimony products do not go through a restriction phase. IM posts them to the public
 website at the same time and day of the hearing. (See the PostTheTestimony posting notification in the Notifications section
 below.)
- Sensitive But Unclassified (SBU): Products that contain sensitive information. SBUs are not distributed to the requestor or
 agency personnel by IM and not posted to the GAO public website. An encrypted version of their PDFs is disseminated to the
 requestors and agency personnel.

Product Number: SBU product numbers are identified with the "SU" suffix as in GAO-13-415TSU.

To process an SBU:

1. The engagement team sends a completed Form 67: "Sensitive But Unclassified Submissions into Publications Database" to lnfoManagement@gao.gov. The form requests that IM log the SBU product into the GAO Internal Publications Database. (See sample below.)



2. IM responds to the e-mail from the engagement team, requesting the DM version of the product and read-only temporary access to it.

- 3. Once the DM file and access to it have been given to IM, IM enters the SBU into the BDE and PMR systems.
- 4. Once the BDE and PMR systems are complete and quality-checked, the BDE record is loaded into DocDB. This will allow the record to appear in the GAO Internal Publications Database.
- 5. Once the record appears in the publications database, IM notifies the team that the record is now available in the database and that IM's access to the DM file can be removed.

Special Instructions:

- o For the summary fields (the BDE Abstract Background and Findings, and the PMR Description fields), IM does not enter summary information. Instead, IM enters only a note in the BDE and PMR fields: "No summary available."
- **Non-Internet (NI)**: NIs are not distributed to the requestor or agency personnel by IM and not posted to the GAO public website. An encrypted version of their PDFs is disseminated to the requestors and agency personnel.

Product Number: NI product numbers are identified with the "NI" suffix as in GAO-13-180TNI.

Special Instructions:

- o For BDE Find/Track tab, select "Yes" for "Is this an NI (Not Internet) product?"
- o For the summary fields (the BDE Abstract Background and Findings, and the PMR Description fields), IM does not enter summary information. Instead, IM enters only a note in the BDE and PMR fields: "No summary available."

<u>Form 115</u>: "The Form 115 provides instructions to GAO's Distribution staff about who should receive a product; in what format recipients should receive a product (the deliverable); how recipients should receive a product (the delivery method); and when recipients should receive a product." (<u>Using the Product Planned Distribution System (Form 115) Guide</u>)

The form is available under "Update Distribution Instructions" tab in the "Engagement Results Phase" application located at https://engagement.gao.gov/erp/.

For more information on distribution, see the PMR Distribution section below.

Technical Information

Final PDF File Location (where the ISTS EPS places the final file for posting): U:\Web Posting\Testimonies Coding:

• Server Location: ??

Testimonies given by the Comptroller General should be posted on the CG Testimony page as well at http://www.gao.gov/cghome/testimonies.

Notifications

IM receives various notifications throughout the indexing process. Below are descriptions for the specific notifications:

- **Distribution Notification** Testimonies are not distributed by IM; if a Testimony contains recommendations, the engagement team sends the formal 60-day notification to the target agency.
- **Publishing Notification** When the ISTS EPS has produced a final PDF of the product and places it in the specific folder for such products in the U:Drive Web Posting folder, the ScanPub1@GAO.GOV script sends a notification to the e-mail address for each IM team member alerting them of the addition.
- De-Restriction Notification Testimonies are all restricted.
- Posting Notification Testimonies are posted to the GAO's public website site through the following notification:
 - PostTheTestimony Notification: At the start of a hearing, a member of Congressional Relations sends an e-mail to PostTheTestimony@gao.gov instructing IM to post a testimony to the public website; the e-mail includes the product number in subject line.
 - <u>Daybook Notification</u>: Public Affairs (PA) sends a listing of all products that should appear in the mailing list e-mail that updates subscribers on that day's release of GAO products. That listing is known as the Daybook. When each of the listed products has been posted, IM then begins processing the mailing list message.
 - For more information on Daybook and Distribution processes, see <u>GAOHQ-#5458243-GAO IMPD INFORMATION MANAGEMENT STANDARD OPERATING PROCEDURES</u> (version 2, DM# <u>5458243</u>)

Database Elements

The list below contains information on what to enter into each data field of both the BDE and PMR records.

For details on the BDE and PMR applications, each data field, and the source for the data fields, please refer to the following documents:

- For the BDE details: <u>GOAL4_NETOPS-#138864-IMPD_INFORMATION_MANAGEMENT_SOP_FINAL</u> (version 12, DM# <u>138864</u>)
- For the PMR details: <u>GAOHQ-#5458243-GAO IMPD INFORMATION MANAGEMENT STANDARD OPERATING PROCEDURES</u> (version 2, DM# <u>5458243</u>)

BDE Record:

Find/Track Tab

- Report Number: In footer of document (from PDF)
- <u>Job Code</u>: On second- or third-to-last page of document (from PDF)
- <u>Title</u>: On cover page of document (from PDF)
- <u>Daybook Date</u>: Date of public release¹
- Final Hard Copy Receipt Date: Date of entry into BDE

Initial Web Posting Data Tab

- Restriction Status: Unrestricted
- Document Issue Date: Date at the top of the document (from PDF)
- Actual Release Date: Date of public release
- Document Type: T (Testimony) or H (Statement for the Record)
- Broad Subject Heading: As appropriate per the text of the product
- <u>Strategic Goal</u>: On **ERS Master Engagement Report form**
- GAO Units

¹ The date the product is posted to <u>www.gao.gov</u> is the "issuance" date, whereas the date of the official product delivery to the requester is the "release" date, whether restricted or unrestricted. If restricted (very unusual), the release date cannot equal the issuance date.

- (<u>Programming</u>): GAO organization witness is affiliated with; on cover page of document (from PDF and ERS Master Engagement Report form)
- o (Investor) On ERS Master Engagement Report form
- o (Joint): On ERS Master Engagement Report form

Addressees/Req./Witnesses Tab

- <u>Addressees</u>: Congressional committee, commission, or other entity to which testimony is being given; in header of cover page **(from PDF)**
- Requestors: Members of Congress listed on ERS Master Engagement Report form
- Witness: GAO employee listed after followed by "statement by" or "statement of" on cover page of PDF

Indexing Tab

- <u>Director/Asst. Director</u>: from ERS Master Engagement Report form
- Engagement Source: from ERS Master Engagement Report form
- <u>Pagination</u>: Enter the following numbers (from PDF):
 - Total number of pages
 - o Byte size: from PDF properties.
 - Number of pages in body
 - o Number of enclosures, appendices, attachments
 - o Number of pages of enclosures, appendices, attachments
- Orgs Concerned: As appropriate per the text of the product
- <u>Subject Terms</u>: As appropriate per the text of the product
- <u>Identifiers</u>: As appropriate per the text of the product
- Descriptive. Notes: N/A
- Contributors: At the end of the text, usually under "GAO Contact and Staff Acknowledgments" section

Laws Tab

• <u>Laws</u>: As appropriate per the text of the product

Abstract Tab

- <u>Background</u>: the text under "Why GAO Did This Study" of the Highlights page
- Findings: the text under "What GAO Found" and "What GAO Recommends" of the Highlights page

PMR Record:

Product Type: Publication

Metadata Tab

- Release Date (Summary Pg): Date at the top of the document (from PDF)
- Issue Date (RIP box date): Date at of public release
- Added Date: Date of entry into PMR
- <u>Document Type</u>: Testimony or Statement of Record
- Requestor/Addressee: Address is congressional organization listed on the cover (from PDF); No requestors.
- Witness: GAO employee who signed the letter
- Strategic Goal 1: On ERS Master Engagement Report form
- Strategic Goal 2: On ERS Master Engagement Report form
- Number of Pages: Total number of pages of the letter.
- Color Pages: N/A
- <u>Director</u>: GAO employee who signed the letter
- <u>Director Email</u>: e-mail of the GAO employee who signed the letter (from PDF's Highlights page)
- <u>Director Phone</u>: phone number GAO employee who signed the letter (from PDF's Highlights page)
- <u>Director Two</u>: Second GAO employee who signed the letter (if available) (from PDF's Highlights page)
- <u>Director Two Email</u>: e-mail of the GAO employee who signed the letter (from PDF's Highlights page)
- <u>Director Two Phone</u>: phone number of the GAO employee who signed the letter (from PDF's Highlights page)
- Assistant Director: On ERS Master Engagement Report form
- <u>Assistant Director Email</u>: e-mail of the assistant director from ERS Master Engagement Report form (from GAO phonebook)
- <u>Jobcode</u>: On second- or third-to-last page of document (from PDF)
- Engagement Source: On ERS Master Engagement Report form
- Programming Team 1: GAO organization affiliated with witness on ERS Master Engagement Report form
- Investing Team(s): On ERS Master Engagement Report form

- <u>Joint Team(s)</u>: On **ERS Master Engagement Report form**
- <u>Description</u>: Text from **PDF Highlights** page that fall under the following headings:
 - What GAO Found
 - Why GAO Did This Study
 - What GAO Recommends
 - For more information, please contact . . .
- Contributor(s): GAO personnel who helped create report, usually listed in the last paragraph
- Restricted Days: N/A
- Supplementary Urls 1: N/A

Taxonomy Tab

Using Add to this set field, add the necessary data for the following sections:

- PROD Thesaurus: As appropriate per the text of the product
- PROD Concept Extraction Laws: As appropriate per the text of the product
- PROD Concept Extraction Agency: As appropriate per the text of the product
- PROD Concept Extraction Programs: N/A
- PROD Concept Extraction People: N/A
- PROD Concept Extraction Place: N/A
- PROD Topic Taxonomy: As appropriate per the text of the product
- PROD Agency Taxonomy: As appropriate per the text of the product
- PROD Collection: N/A

Related Items Tab

- Upload PDF-version of the product as a child of the parent PMR record.
- Upload PDF-version of the Highlights as a child of the parent PMR record.

Workflow Tab

- Click "Submit for approval."
- Approver will review record, and approve it from the Dashboard's Approval Alert queue

Distribution Tab

WWW Distribution: Testimony products are distributed to the public website through the distribution channel buttons in the Distribution Tab. The [DEV] buttons push the PMR record to the development instances of the channels for QA review prior to pushing to the production [PROD] instances.

- Click the Run button for the Push to WWW [DEV] button to make the record appear on www-dev.gao.gov.
- Click the **Run** button for the **Push to WWW [PROD]** "Run" button to make the record appear on **www.gao.gov**.

NOTE: Text based on **Section 7.5** of <u>GAOHQ-#5458243-GAO IMPD INFORMATION MANAGEMENT STANDARD OPERATING PROCEDURES</u> (version 2, DM# <u>5458243</u>)

QA Process

The Information Management Team will follow the defined QA Process for all GAO Product Types that they are responsible for posting. Every week there will be two IM Team members assigned to the QA function. Below is the step-by-step process to be followed:

- Once indexing is completed for the product, the Indexer will be the first QA reviewer.
- He or she will print out the relevant QA Product Checklist. This checklist will be used by all 3 QA reviewers.
- Once the Indexer has completed QA on their own work, they will make an assignment in the ITSM ticket to QA Reviewer 1 and QA Reviewer 2. They will turn over the QA Product Checklist to QA Reviewer 1 who will then turn it over to QA Reviewer 2 for their review. The QA Product Checklist will be kept in a separate binder for daily review by SRA Management.
- QA Reviewer 1 will perform QA on the product type. They will use the documented QA Checklist that has been developed for each product type. Each QA line in the checklist will be verified with a checkmark and will be initialed by the Indexer, QA Reviewer 1 and QA Reviewer 2.
- In the event that any errors are discovered, these will be documented in the Comments section of the QA Checklist and will be sent back to the Indexer for correction.
- After correction(s) have been made, the QA process starts over from the beginning.
- Once QA is completed, the Indexer will be responsible for distributing the product.

TESTIMONY - QA Check List

Comments:	5 :		

BDE Record

Record Tab	Fields to QA	Verified (✓)	Initials
	Report Number		
	Job Code		
Find/Track Tab	Title		
FIIIU/Track rab	Daybook Date		
	Form 115 Receipt Date		
	Final Hard Copy Receipt Date		
	Restriction Status		
	Document Issue Date		
Initial Wah Docting Tah	Document Type		
Initial Web Posting Tab	Broad Subject Heading		
	Strategic Goal		
	GAO Team		

Record Tab	Fields to QA	Verified (✓)	Initials
	Addressees		
Req/Addressees/Witness Tab	Requestors		
	Witness		
	Director/Asst. Director		
	Engagement Source		
	Pagination		
ludovina Tob	Orgs Concerned		
Indexing Tab	Subject Terms		
	Identifiers		
	Descriptive Notes		
	Contributors		
Laws Tab	Laws		
Abotroot Tob	Background		
Abstract Tab	Findings		

PMR Record

	Fields to QA	Verified (✓)	Initials
	Release Date (Summary Pg)		
	Issue Date (RIP box date)		
	Added Date		
	Document Type		
	Requestor		
	Addressee		
	Witness		
Metadata Tab	Strategic Goal 1		
Wetauata Tab	Strategic Goal 2		
	Number of Pages		
	Color Pages		
	Director		
	Director Email		
	Director Phone		
	Director Two		
	Director Two Email		

	Fields to QA	Verified (✓)	Initials
	Director Two Phone		
	Assistant Director		
	Assistant Director Email		
	Jobcode		
	Engagement Source		
	Programming Team 1		
	Investing Team(s)		
	Joint Team(s)		
	Description		
	PROD_Thesaurus		
	PROD_Concept_Extraction_Laws		
	PROD_Concept_Extraction_Agency		
	PROD_Concept_Extraction_Programs		
Taxonomy Tab	PROD_Concept_Extraction_People		
	PROD_Concept_Extraction_Place		
	PROD_Topic_Taxonomy		
	PROD_Agency_Taxonomy		
	PROD_Collection		

	Fields to QA	Fields to QA Verified (✓)		Initials	
	Product PDF File: Link Label				
Related Items Tab	Product PDF File: File Type				
Related items rab	Highlights PDF File: Link Label				
	Highlights PDF File: File Type				

ATTACHMENT VV

PROBLEM NOTIFICATION REPORT

TA	SK ORDER NUMBER:	DATE:
1.	Nature and sources of problem:	
2.	COTR was verbally notified on: (date)	-
3.	Is action required by the Government? Yes No	
4.	If YES, describe Government action required and date require	ed:
5.	Will problem impact delivery schedule? Yes No	_
6.	If YES, identify what deliverables will be affected and extent of	of delay:
7.	Can required delivery be brought back on schedule? Yes	No
8.	Describe corrective action needed to resolve problems:	
9.	When will corrective action be completed?	
10.	Are increased costs anticipated? Yes No	
11.	Identify amount of increased costs anticipated, their nature, ar responsibility for problems and costs:	nd define Government



United States Government Accountability Office

Contract Number: | Task Order Number:

GAO Information Management Standard Operating Procedures Manual

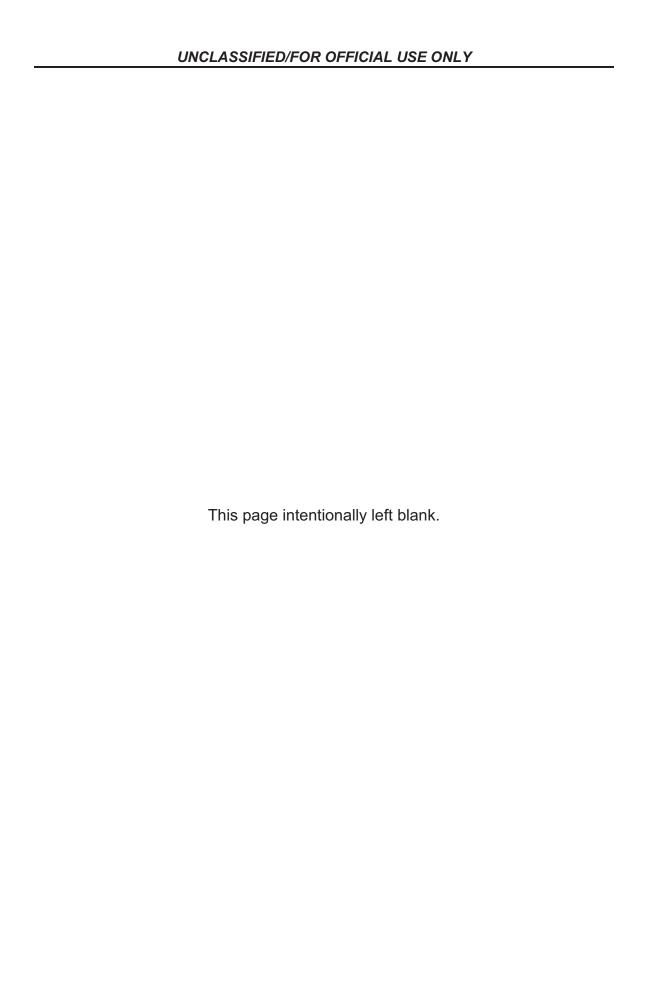
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List of Acronyms and Abbreviations

Acronym	Description
ARM	Applied Research and Methods
ASCII	American Standard Code for Information Interchange
вро	Business Process Owner
ccs	Congressional Contact System
CFO	Chief Financial Officer
CG	Comptroller General
СНОВ	Cannon House Office Building
CSV	Comma-Separated Values file format
DM	Data Management system used by GAO
DSOB	Dirksen Senate Office Building
EAGLE	Electronic Assistance Guide for Leading Engagements
EDP	Electronic Data Processing
ERP	Engagement Results Phase
FHOB	Ford House Office Building
GAO	Government Accountability Office
GPO	Government Printing Office
HSOB	Hart Senate Office Building
IHSF	Information Handling and Support Facility
IM	Information Management
ITSM	Information Technology Service Management
KS	Knowledge Services
LHOB	Longworth House Office Building
MATS	Mission Assignment Tracking System
MIF	Maker Interchange Format
MRT	Maximum Response Time
NT	New Technology
OCR	Optical Character Recognition; Office of Congressional Relations
OIG	Office of the Inspector General
OIMC	Office of Information Management and Communications
OPA	Office of Public Affairs
PA	Public Affairs

Acronym	Description
PAG	Product Assistance Group
PDF	Portable Document Format
PMR	Product Metadata Repository
PMTS	PAG Management & Tracking System
POC	Technical Point-of-Contact
PPT	Microsoft PowerPoint file format
QA	Quality Assurance
QCI	Quality and Continuous Improvement
RHOB	Rayburn House Office Building
RSA	An algorithm for public-key encryption that is used at the time of login to a software
RSOB	Russell Senate Office Building
SBU	Sensitive, but Unclassified – designation to GAO reports or correspondence not publicly distributed or posted online
SES/SL	Senior Executive Service and Senior Level (SES/SL)
SOP	Standard Operating Procedures
SQL	SQL (sometimes expanded as Structured Query Language) is a computer language used to create, retrieve, update and delete data from relational database
SRA	Systems Research & Applications International
TSV	Tab-Separated Values file format
TXT	Plain Text file format
URL	Uniform Resource Locator - An address on the World Wide Web
USC	United States Code
WebOps	GAO Phoenix Web Operations
XML	The Extensible Markup Language (XML) is a general-purpose markup language. Its primary purpose is to facilitate the sharing of data across different information systems, particularly via the Internet .

Section 1 Introduction

1.1 Purpose

This document describes the standard operating procedures (SOP) for GAO Phoenix Information Management (IM). The purpose of each of the functions is highlighted in Section 2.0 and presented in detail in the referenced section.

1.2 Scope

The scope of this document is to provide the key steps in executing the procedures. There are 15 sections. Each describes in detail the processes undertaken by the Information Management staff.

1.3 Document Organization

Section 1: Introduction – Is the document's purpose, scope, organization, references and maintenance policy.

Section 2: Purpose: Provides an overview of the function/tasks performed by the IM Staff.

Sections 3 through 14: Describes the individual tasks performed by the IM Staff.

1.4 Appendices

Phoenix processes and procedures that are no longer done regularly have been removed to the appendices. These include batch and table processing for accessible text generation; and USORG handling of Congressional Contact System (CCS) and updates for elections.

1.5 References and Relationship to Other Documents

This document is stored and maintained in the Hummingbird Document Management system (DM# 138864).

1.6 Maintenance of this Document

When business processes are modified or enhanced, changes shall be noted in the "Document Change History" (page iii). Information Management staff member should update the document as needed and present the document change to the IM Services Team Manager who review changes returns the document to the staff member for final review and approval. The changes will then be reviewed with the appropriate business process owner (BPO) from GAO. Once they are approved, the changes will be formally adopted into the document.

Section 2 Purpose

2.1 Accessible Text Generation (Section 3)

Business Process Owner (BPO): Publishing Technical Support and E-Dissemination Manager, KS

All GAO reports must be made accessible to comply with the Section 508 amendment to the Rehabilitation Act of 1973 in 1986. These texts, once created, need to be edited and then posted to the Web so that people with visual disabilities can access them and listen to them with a screen reader.

2.2 Re-issues (Section 4)

BPO: Publishing Technical Support and E-Dissemination Manager, KS

Recalls are the official GAO process for correcting errors in reports' records and PDFs on the web. For instance, if there is broken link on the PDF displayed on the web, the Recall process is the official process of correcting the mistake in the PDF, Accessibility file and the PMR Database and then reposting the corrected file to the website, sometimes with an errata statement.

2.3 Taxonomy (Section 5)

BPO: Library and Information Services Director, KS

GAO and Information Management (IM) staffs identify categories that need to have terminology analyzed for conciseness, accuracy, and clarity. The IM Staff begins researching terms used within the category by scientific glossaries, current GAO glossaries, historic GAO glossaries, and any other sources that may be applicable. The IM Staff member then sends the proposed terms for GAO review. Once approved, the IM Staff member adds the term to the appropriate glossary. In addition, this IM Staff member re-indexes terms.

2.3.1 Teragram

Teragram is a content categorization and concept extraction tool that will be used for assigning high level topics, programs, and subject terms from the GAO thesaurus amongst other things.

2.3.2 MultiTes

MultiTes is the thesaurus maintenance tool used for GAO thesaurus. It allows for term additions, removals, and modifications. It has the ability to import lists of terms and export them as well.

2.4 USORG Process (Section 6)

BPO: Library and Information Services Director, KS

The USOrg database contains contact information for Federal Legislative Branch personnel (congressional members, congressional members' staff, committees, and committee staff) and Federal Executive Branch personnel (president, vice-president, and cabinet members). It also contains all the current agencies of the federal government (executive, congressional and independent), and their associated top personnel. The IM Staff member maintains this database regularly, making updates as necessary. This section outlines the maintenance procedures.

2.5 Bibliographic Data Entry (BDE) Process (Section 7)

BPO: Library and Information Services Director, KS

The Bibliographic Data Entry (BDE) system collects information about GAO's audit and other products in a searchable database that interfaces with the web, so that online users can search to find items of interest to them. This section gives an overview of the system, including its various screens and navigation bar, and the process of cataloging the GAO products.

2.6 Product Metadata Repository (PMR) Process (Section 8)

BPO: Library and Information Services Director, KS

The Product Metadata Repository (PMR) system collects information about GAO's audit and other products in a searchable database that interfaces with the web, so that online users can search to find items of interest to them. This section gives an overview of the system, including its various screens and navigation bar, and the process of cataloging the GAO products.

2.7 DocType Processing Instructions (Section 9)

This section contains detailed notes on how to process each particular document type in each of the systems (BDE and PMR).

2.8 Form 66 Process (Section 10)

BPO: ISTS, EAAG POC for Form 66

Form 66 is the database that contains all of the recommendations GAO makes in its reports. They are imported from Doc_DB, so anything the IM staff put in DOC_DB automatically goes into Form 66. In Form 66, the GAO teams are able to update the status of the recommendations (i.e., what actions have been taken) and make notes about them while in progress. When all recommendations have been taken care of, they are completed and loaded out of the system.

2.9 Accomplishment Reports Follow-up (Section 11)

BPO: ISTS, EAAG POC for Form 66

The Accomplishment Reporting System is used by mission staff to record all accomplishments based on recommendations for a particular fiscal year. Contract staff is responsible for the QA of the data entered into the system by the team.

2.10 Daybook (Section 12)

BPO: Director, WSG

The Daybook is GAO Public Affairs' daily e-mail message to mailing list subscribers that contains a list of all the audit products that are issued on a given day. This section outlines the procedures involved in processing that e-mail message, and posting those products to the GAO public website.

2.11 Reports (Section 13)

2.11.1 Reporting Statistics

- 2.11.1.1 Document Indexing Process
- 2.11.1.2 USOrg/ Thesaurus Maintenance
- 2.11.1.3 Accessibility Text Process

2.11.2 GAO Alpha Phonebook

2.11.3 Patron Report

BPO: Library and Information Services Director, KS

The Patron report, that the IM Staff creates for Information Services, contains information about all GAO staff that is used to create patron records in the library's online circulation system. This allows GAO staff to check books out of the library, to request Inter-library loans and to customize their use of the library's online catalog.

The IM Staff generate the Patron report every other Monday starting on 3/19/2007.

2.12 GAO Mailing Lists (Section 14)

BPO: Director, Publications and Dissemination, KS

GAO Mailing lists are created for special products that need to be distributed either externally or internally. This is primarily done for the annual Performance and Accountability Report and the Performance and Accountability Highlights.

2.13 Historical Products (Section 15)

BPO: Library and Information Services Director, KS

Currently, there are several thousand GAO documents from past years that are not listed in the Publications Database or do not have an electronic version available on www.gao.gov. Staff processes these documents to make them publicly available and to complete the GAO collection of documents.

Section 3 Accessible Text Generation

Accessible text is produced for any of the following:

- Products in any of the following places:
 - In the U:\Web Posting folder as Reports, Testimonies, Correspondence, or CG Presentations.

Note: Alerts are sent out via InfoManagement e-mail notification for files put into the above folder.

- In U:\Web Posting\Accessibility folder.
- On the Daybook.

Note: All accessibility staff should be added to the initial OPA Daybook email list and should subscribe to Daybook emails on the website at http://www.gao.gov/subscribe/index.php. Subscribe to "Today's Reports" and "Month in Review."

- Special requests from any of the following sources:
 - Web Services Group for a special publication or CG briefing.
 - Electronic Month-in-Review QC group for a previously released product currently lacking accessible text.
- Special publications (e.g. Performance and Accountability Report, Performance Plan, Strategic Plan, etc.).

3.1 File Maintenance

3.1.1 File Maintenance Before Accessible Text Processing

When documents are ready for printing, posting, or to appear on the Daybook, the Product Assistance Group (PAG) deposits the source files in the **U:\Web Posting\Accessibility** folder.

- 1. Cut and paste the product files from the U:\Web Posting\Accessibility folder to your own folder within the U:\Web Posting\Accessibility\SRA folder.
- 2. Copy those same folders to the **U:\Web Posting\Accessibility\SRA\Source** Documents folder to retain an unaltered version.
- 3. For ease of reference, print out the final versions of the documents (located in the **U:\Web Posting\Accessibility** folders).

3.1.2 File Maintenance After Accessible Text Processing

When you have completed accessibility processing, do the following:

- 1. Save and close all documents.
- 2. Copy and paste the final text version of the document to:

U:\For Printing\Accessibility (final ASCII files)\FY XX (current year) folder.

3. Cut and paste the source folder into the following location:

U:\Web Posting\Accessibility\SRA\done XX (current year)

3.2 Uploading File to PMR (for Distribution and Web Posting)

Once the accessible text of an audit product has been generated, upload the file to the Product Metadata Repository (PMR). The following steps walk you through this process.

Note: An overview of PMR can be found in section 7.2.

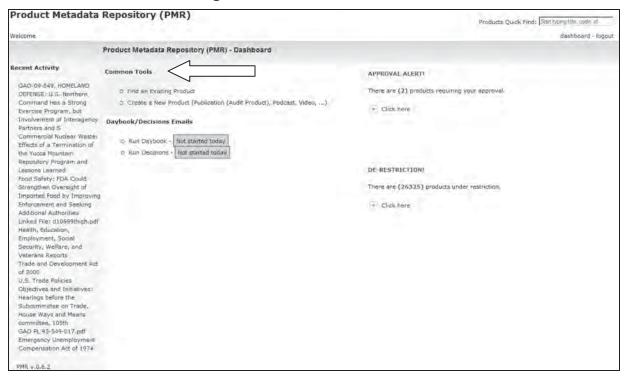
- To access PMR, launch a web browser and go to PMR website: http://pmr.gao.gov/.
 The Login page below appears.
- 2. Login by typing in the following for the fields:
 - Login: User's NT login name.
 - Password: User's PIN + 6-Digit RSA Token Number.

Figure 3-1 PMR Login Screen

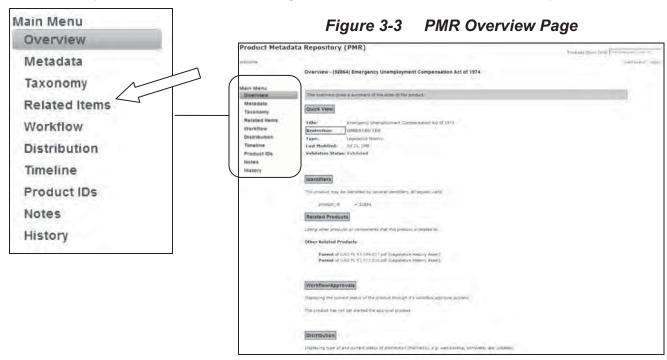


- 3. If the publication record (the record for the audit product, with which the accessible text file will be associated as a child product) is available, go the **Find an Existing Product** on the Dashboard under Common Tools.
 - If there is no publication record of the audit product, select Create a New Product on the Dashboard.

Figure 3-2 PMR Dashboard



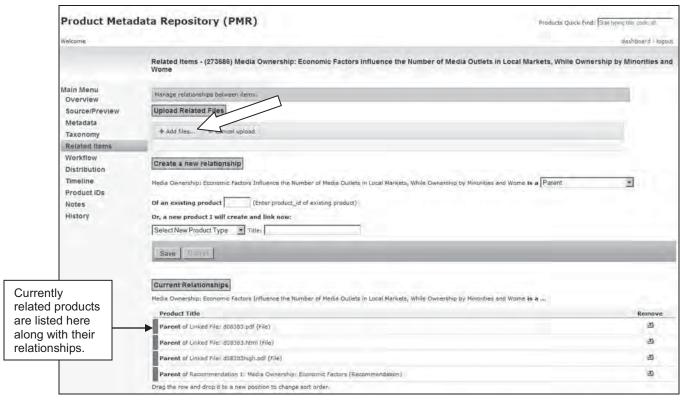
4. In the publication record's Overview Page, select Related Products in the left-side panel menu.



5. In the Related Items tab, upload the text file from the U:\For Printing\Accessibility (final ASCII files)\FY XX (current year) folder by selecting Add files.

PMR automatically creates and associates a PMR record for each file that is uploaded.

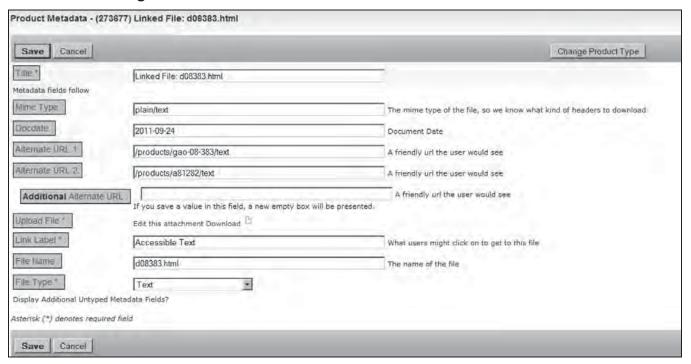
Figure 3-4 PMR Related Items tab



- 6. Select the newly associated text file, and modify its Metadata page with the below information:
 - Title: Pre-populated; based on file name type
 - Mime Type: Pre-populated; based on file name type
 - Docdate = Date of letter of the product in YYYY-MM-DD format
 - Alternative URL 1: Leave blank; applied by PMR
 - Upload File: Pre-populated; the file attachment
 - Link Label: Accessible Text
 - File name: File name of HTML file.
 - Ex: d08383.html
 - File Type: Text

Below is an example of a populated metadata page of the accessible text child record:

Figure 3-5 PMR Metadata of Accessible Text File



- 7. Once the child record is complete,
 - Go to Related Items tab
 - Click on the Parent record (listed at the bottom of page)
 - Select the Distribution tab to display the available Distribution channels.
- Check if the record has been pushed to any server: dev and prod instances of Watchdog, Twilight
 or WWW, <u>not</u> the mail servers, and <u>not</u> the Agency 60 Day Letter Formerly Restricted prod
 server.

You can see that under the Server column. For server buttons that have been pushed the Action buttons will be **Re-Run Now** and **UNDO**. See Figure 3-6 below.

If it has not been pushed the Action buttons will be Run Now.

9. For each server button that has been pushed, select the **Re-Run Now** action button for that server.

This will refresh that server with the newly added data (the accessible text file).

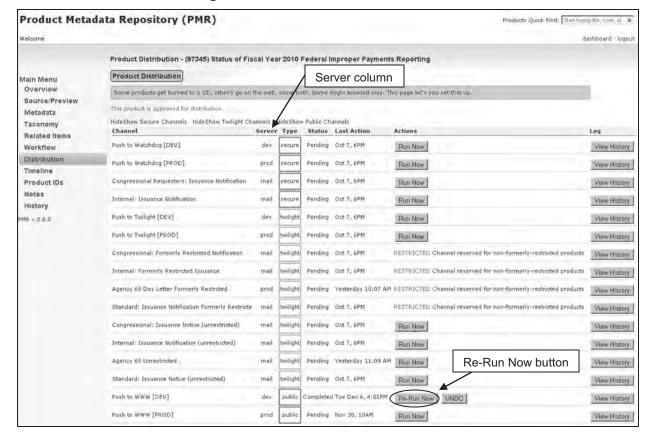


Figure 3-6 PMR Distribution tab

3.3 Standard Rules for Accessibility Processing

Some things to remember about the accessible files, regardless of the format of their source documents:

- 1. Every paragraph should end with some punctuation mark. For those lines that do not end with a punctuation mark, insert a colon (example: addressee information, table of contents)
- 2. Each cell in a table should be on a separate, dedicated line that indicates <u>ALL</u> of the information a sighted person would derive from reading the table. More explanation on this topic is found below under "Tables."
- Paragraph format and punctuation should replicate what is found on the printed page. Except for tables and graphics, the text of an accessible version of a GAO publication should look like the posted PDF version.
- 4. The FrameMaker script automatically inserts a "disclaimer" and the beginning of each document, and the GAO Mission statement near the end of each document. Insertion of a beginning header and some manual manipulation of the disclaimer are needed to individualize each document.

3.4 Accessible Text File Process (with Microsoft Word)

- 1. Obtain Source Files (see previous section on file maintenance 3.1).
- 2. Generate FrameMaker file from Word document (primary source) by doing the following:

Note: There are subtle differences between the processing of a document with a Word (.doc or .rtf) source file and one with a FrameMaker (.book, .fm or .mif) source file. Keep on the lookout for unusual punctuation, especially in tables.

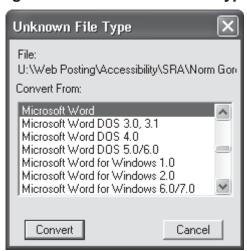
- 1) Open FrameMaker 7.0.
- 2) On the top menu bar, go to File > New Report Main Template.
- 3) Go to File > Import > File.
- 4) Select the most recent version of the report in Word Format.
- 5) Make sure that the "Copy Into Document" button is checked.

Figure 3-7 Copying into Document



- 6) Click Import.
- 7) Click Convert.

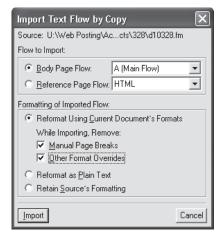
Figure 3-8 Unknown File Type



8) Ignore the "unresolved cross-references" window and select OK.

- 9) When the "Import Text Flow by Copy" window appears, ensure it has the following settings:
 - i. Body Page Flow = A (Main Flow)
 - ii. Formatting of Imported Flow:
 - Reformat Using Current Document's Formats: checked
 - While Importing, Remove Manual Page Breaks: checked.
 - Other Format Overrides: check.

Figure 3-9 Import Text Flow by Copy



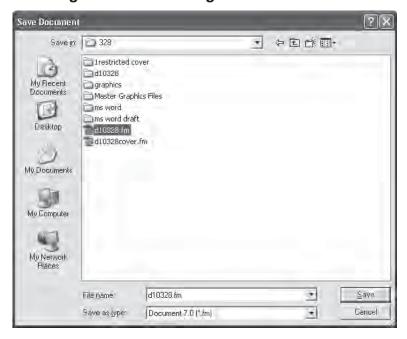
- 10) Click Import.
- 11) When the .fm file appears, click anywhere in the text to activate it.
- 12) Go to GAO > Cleanup Word Document.
- 13) Select no when asked "Do You Want to Remove TOC paragraphs?"
- 14) Go to GAO > Apply GAO Table Formats.
- 15) For each table, do the following:
 - i. Enter the total number of column heading rows.
 - ii. Select the format of the table:
 - "GAO 2/3 table, no title" is a 2/3 wide table in the text of a report (most common)
 - "GAO full table, no title" is a full page wide table in the report text (most common)
 - "GAO 2/3 table" takes up 2/3 of the width of the page and comprises its own appendix
 - "GAO full table" takes up the entire width of the page and comprises its own appendix

Figure 3-10 Table Formatting in FrameMaker



16) Save the file as d(FY)(PRODUCT NO).fm. For example, GAO-10-301 would be saved as d10301.fm.

Figure 3-11 Saving FrameMaker Files



- 17) Go to GAO > Generate ASCII.
 - i. Select Testimony or Correspondence for the report type. Select "Yes" for any document type as this will allow placement of the GAO Mission statement.
 - ii. Select CANCEL on the Enter Report Number screen, when prompted, as this step is no longer required.

Figure 3-12 Entering Report Number



3.5 Accessible Text File Process (with Adobe FrameMaker)

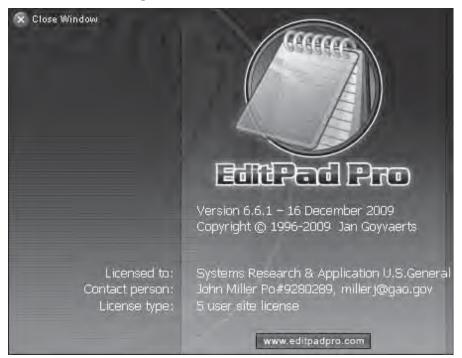
- 1. Open the FrameMaker file from the source file folder (.book, .fm, .mif); select the .book file at the top of the ensuing window.
- 2. Go to GAO > Generate ASCII
- 3. Select Testimony or Correspondence for the report type. Select "Yes" for any document type as this will allow placement of the GAO Mission statement.
- 4. Select CANCEL on the Enter Report Number screen, when prompted, as this step is no longer required.

Note: Save often.

3.6 Accessible Text File Process (with EditPad Pro 6)

1. Open the text file in EditPad Pro 6.

Figure 3-13 EditPad Pro 6



- 2. Go to Convert > Line Breaks > Wrapping.
- 3. Go to Convert > Tabs > Spaces.

Note: This may not be necessary using EditPad Pro 6.

4. Insert header and add title manually:

This is the accessible text file for GAO report number GAO-(insert report number) entitled '(insert title in single quotes)' which was released on (insert daybook date).

- 5. Open the highlights Word file.
 - a. Copy and paste the highlights under the appropriate headers in the text file.
 - i. The "Highlights of..., a report to...." Information should go under "GAO Highlights."
 - ii. The web address and contact information should go after the information on the Recommendations.
 - iii. If no recommendations are listed in the Highlights, replace "What GAO Recommends" in the text file with the address/contact information.
 - b. At the end of the address/contact information, type in [End of section].
 - c. Close the Highlights Word file. (DO NOT SAVE CHANGES.)
 - d. Select the entire Highlights from "GAO Highlights" to [End of section], cut it, and paste it beneath the Report Number (between the cover information and the table of contents).
 - e. Replace with a single space, followed by 2 hard returns.
 - f. Search for double spaces.
 - g. Replace with single space.
 - h. Repeat until all double spaces are eliminated.
- 6. Change "Letter1:" in the table of contents to "Letter:" (Word docs only).
- 7. In Frame documents:
 - a. Remove double tables (Tables Tables:) and double figures (Figures Figures:)
 - Remove [See PDF for image] and [End of table] ANYWHERE in the Table of Contents or Abbreviations/Addressee information.
 - c. Add "Abbreviations:" at the top of the list of abbreviations.
- 8. Format the Abbreviations to resemble the list in the printed report:

GAOGovernment Accountability Office GSAGeneral Services Administration GPO Government Printing Office VADepartment of Veterans Affairs

Should read:

GAO: Government Accountability Office:

GSA: General Services Administration:

GPO: Government Printing Office:

VA: Department of Veterans Affairs:

9. Format addressee information in the same manner:

The Honorable Arlen Specter Chairman The Honorable Patrick J. Leahy Ranking Minority Member Committee on the Judiciary United States Senate:

Should read:

The Honorable Arlen Specter:

Chairman:

The Honorable Patrick J. Leahy:

Ranking Minority Member:

Committee on the Judiciary:

United States Senate:

3.6.1 Correcting Frame Inserted Tags for Figures.

1. Frame inserts the following after each figure heading:

[See PDF for image]

2. Replace that tag with the following:

[Refer to PDF for image: (describe the image briefly here: example: line graph)]

- 3. Insert figure data as gleaned from .EPS files, .Al files, proof sheets, or other source files.
- 4. If not present, insert the following after all figure data:

[End of figure]

3.6.2 Table Processing

The most critical, and time consuming, part of accessible text generation is the processing of tables and graph data. In the past, tables were simply data described by columns and rows. The data supplemented the text of the report. Increasingly as we enter the 21st century, GAO is using tables to provide additional and more complex information to enhance or even replace typed text, in a variety of complex tabular formats not easily translated into accessible form. Each table is literally different, and attention to detail is required to ensure that the final accessible text version of the table recreates exactly data represented or point intended by the author.

The number of web hits on our accessible publications is incongruent with feasible predictions of the number of visually impaired customers we may have; it is safe to say that a majority of users of our accessible products are sighted; accordingly, we strive to make our products readable to both visually impaired and sighted customers.

The concept behind accessible table processing is simple: each datum in each cell should have its own line of accessible text. Getting to this point is sometimes complicated; especially when multiple entries are located in a single cell with one row header and one column header.

Generally, GAO tables will be formatted for accessibility like this:

Table 3-1 GAO Styled Tables

Row Descriptor	Column Head 1	Column Head 2	Column Head 3
Row Head 1	Data	Data	Data
Row Head 2	Data	Data	Data
Row Head 3	Data	Data	Data

Source: GAO.

Accessible version:

Row descriptor: Row Head 1;

Column Head 1: data;

Column Head 2: data;

Column Head 3: data.

Row descriptor: Row Head 2;

Column Head 1: data;

Column Head 2: data;

Column Head 3: data.

Row descriptor: Row Head 3;

Column Head 1: data;

Column Head 2: data;

Column Head 3: data.

Source: GAO.

[End of table]

Sometimes, you will get secondary and tertiary subheadings for rows and columns. For example, you may get a table formatted like this:

Table 3-2 GAO Table with Secondary and Tertiary Sub-Headings

		Column	n Head 1	Column	n Head 2
Row Descriptor		Column Subhead 1	Column Subhead 2	Column Subhead 3	Column Subhead 4
Row Head 1					
	Row Subhead 1	Data	Data	Data	Data
	Row Subhead 2	Data	Data	Data	Data
	Total	Data	Data	Data	Data
Row Head 2		Data	Data	Data	Data

Accessible version:

Row Descriptor: Row Head 1: Row Subhead 1; Column Head 1: Column Subhead 1: Data; Column Head 1: Column Subhead 2: Data; Column Head 2: Column Subhead 3: Data; Column Head 2: Column Subhead 4: Data. Row Descriptor: Row Head 1: Row Subhead 2; Column Head 1: Column Subhead 1: Data; Column Head 1: Column Subhead 2: Data; Column Head 2: Column Subhead 3: Data; Column Head 2: Column Subhead 4: Data. Row Descriptor: Row Head 1: Total; Column Head 1: Column Subhead 1: Data; Column Head 1: Column Subhead 2: Data: Column Head 2: Column Subhead 3: Data; Column Head 2: Column Subhead 4: Data. Row Descriptor: Row Head 2; Column Head 1: Column Subhead 1: Data; Column Head 1: Column Subhead 2: Data; Column Head 2: Column Subhead 3: Data; Column Head 2: Column Subhead 4: Data. Source: GAO.

[End of table]

Another increasingly used format includes multiple entries in a single cell. For example:

Table 3-3 GAO Tables with Multiple Data in Single Cell

Row Descriptor	Column Head 1	Column Head 2	Column Head 3
Row Head 1	Data A.	Data D.	Data G.
	Data B.	Data E.	Data H.
	Data C.	Data F.	Data I.
Row Head 2	Data	Data	Data
Row Head 3	Data	Data	Data
0.40			

Source: GAO.

Accessible version:

Row descriptor: Row Head 1; Column Head 1: data A; Column Head 1: data B; Column Head 1: data C; Column Head 2: data D; Column Head 2: data E; Column Head 2: data F;

Column Head 3: data G;
Column Head 3: data G;
Column Head 3: data_G;
Row descriptor: Row Head 2;
Column Head 1: data;
Column Head 2: data;
Column Head 3: data.

Row descriptor: Row Head 3;
Column Head 1: data;
Column Head 2: data;
Column Head 3: data.

Source: GAO.

[End of table]

One way to get accustomed to this process is to read the table to yourself. What is the author trying to tell you in each cell? The accessible version of the table should tell you the same information, in the same context. If you do not think you can adequately create an appropriate accessible re-creation of the table, omit it and note it in your statistical notes.

An easy way to create separate lines for each cell is:

- 1. Go to Edit > Search and Replace or CTRL-F.
- 2. In the "Search Text" field, put a semicolon and a space.
- 3. In the "Replace Text" field, put a semicolon and a space, followed by a hard return.
- 4. Hit the Search (Alt-S) or "Replace & Search" (Alt-E) buttons to insert hard returns after the appropriate semicolons.

3.6.3 Graph (Figure) Processing

Graphs contained in each publication fall into two basic categories: (1) illustrations and (2) graphs or charts. The document folder should contain a subfolder with source data files for each graph in either .eps or .ai format. In either case, data can be extracted from the source file by using the following procedure:

- 1. Open the Adobe Illustrator application.
- 2. Select the data file you wish to extract from.

3. Click on the date sets in the graph. The following example depicts a bar graph:

Address Wilder Hamiltonia (Tit Ob J. 44075 L. 35.5 pp. 2006 (CM(KF)refore))

Fig. Co. Type: Type: Swell Febr. Files: Two Weeks Press

Files: The Co. Type: Type: Swell Febr. Files: Two Weeks Press

Files: The Co. Type: Type: Swell Febr. Files: Two Weeks Press

Files: The Co. Type: Type: Swell Febr. Files: Two Weeks Press

Files: The Co. Type: Type

Figure 3-14 Bar Graph

4. Highlight the data to copy from the spreadsheet pop-up:

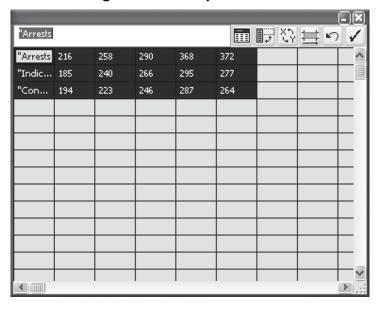


Figure 3-15 Spreadsheet

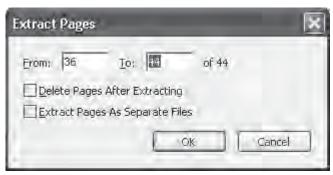
5. Paste the data into the text file, and arrange it in tabular format as indicated earlier in this document. Be sure to accurately portray column and row information in the resulting table.

3.6.4 Comment Letter Processing

Comment letters included in documents are typically not text searchable. Because of this, the pages need to be processed to create plain text to insert into the final text file. The following steps will achieve that goal.

1. Identify the pages included in the PDF as comment letters and extract them.





2. Save these pages as a new PDF file "Pages from Report #FYXXX."

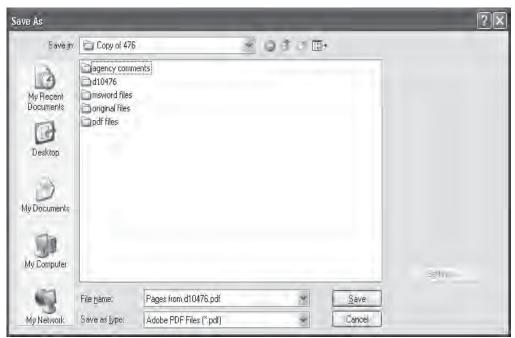


Figure 3-17 Saving PDF Pages

3. Using the Acrobat cropping tool, crop all pages so that only the comment letter pages remain. This will facilitate the OCR process in the following steps. Resave the file.

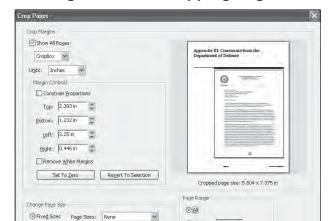


Figure 3-18 Cropping Pages

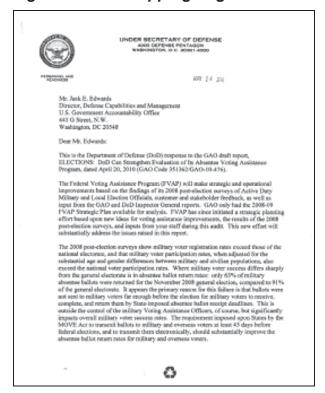
Figure 3-19 Cropping Pages: Detailed

To ∫ of 9

Apply to: Even and Odd Pages ▼

OK Cancel

OCustom Width: 10 10 Height: 10 10



4. To begin the OCR process, open the OmniPage Professional 17 application.

Figure 3-20 OmniPage Professional 17

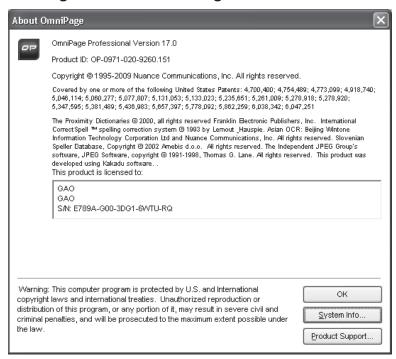
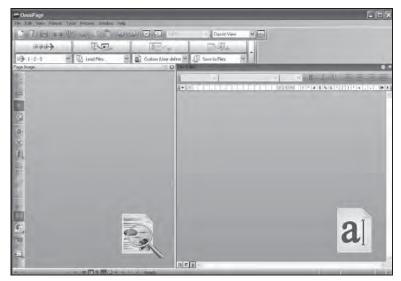


Figure 3-21 OmniPage Professional 17: Main View



5. Select 'Start Processing' button, then load the file you just saved:

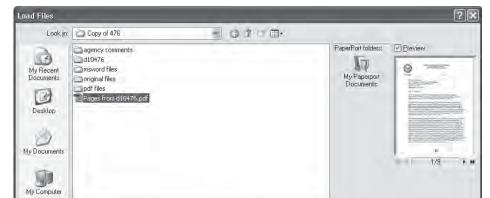


Figure 3-22 Opening PDF Copy

The Proofreader screen will be displayed while processing the file.

PDF - Portable Document Format (*.pdf)

"Pages from d10476.pdf"

⊕ Images

File name

Files of type:

Page jange: 1-9

My Network

6. Click the 'Document Ready' button, then click 'OK' on the Text Editor pop-up.

O Documents

This allows you to skip making corrections within OmniPage since you will be running a spell-check through EditPad later in the process. However, correction can be made by typing the correct spelling, number, etc. in the suggestions box.

ΟK

Advanced >>

▼ Cancel



Figure 3-23 Proofreading

Figure 3-24 Proofreading Complete



7. Save the resulting text file within the proper folder to copy it into your accessible text file in its final format.

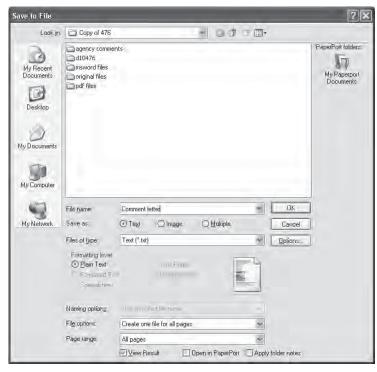
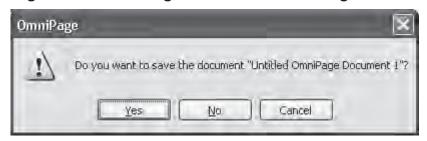


Figure 3-25 Saving Document

- 8. Open the produced file and copy it into the body of your accessible text document in the appropriate location.
- 9. Close OmniPage. The following-pop up screen will allow saving the created document in OmniPage format. This is not necessary if all previous steps were successful.

Figure 3-26 Saving Document in OmniPage Format



3.6.5 Identifying Text Discrepancies

The text of the report is almost ALWAYS identical to the printed page. Do not read word for word looking for discrepancies. Discrepancies in the text you should look for are below:

- Missing section headings (which are rare).
- Improper breaks (usually at a page break).

The following paragraph is an example of an improper break:

This text file was formatted by the U.S. Government Accountability Office (GAO) to be accessible to users with visual impairments, as part of a longer term project to improve GAO products' accessibility. Every attempt has been made to maintain the structural and data integrity of the original printed product. Accessibility features, such as text descriptions of tables, consecutively numbered:

footnotes placed at the end of the file, and the text of agency comment letters, are provided but may not exactly duplicate the presentation or format of the printed version. The portable document format (PDF) file is an exact electronic replica of the printed version. We welcome your feedback. Please E-mail your comments regarding the contents or accessibility features of this document to www.web.ac.no.ndm.new.gov.

The preceding paragraph contains an improper hard return, denoted by a colon and a double hard return. To eliminate this, simply insert a space where the colon and double hard return are.

Paragraphs beginning with a lowercase letter.

This may be an interrupted paragraph that needs to be rejoined.

3.6.6 Text Items to Correct

- 1. <u>Footnotes</u>: Make sure that the report text includes the footnotes and that they are formatted correctly, e.g. [Footnote 1].
- 2. <u>Words with all capital Letters</u>: Find words that are in ALL CAPS (usually in headings, titles) and change them to Initial Caps only. Do not change abbreviations, acronyms, and other proper uses of all caps.
- 3. Extraneous "[End of section]" tags: Eliminate them.
- 4. <u>Hyperlinks</u>: Fix all Hyperlinks, where they exist, and ensure they are in the correct format, especially references to previous GAO documents in footnotes.

Hyperlinks will appear in all Frame documents that contain weblinks; however, they all come through the script needing to be corrected.

G [Hyperlink, http://www.gao.gov/cgi-bin/getrpt?GAO-05-313] AO-05-313:

Should read:

[Hyperlink, http://www.gao.gov/cgi-bin/getrpt?GAO-05-313]:

- 5. <u>Tables and Figures</u>: Cut and paste [End of table] and [End of figure] so that they come AFTER the table/figure's source information and footnotes.
- 6. <u>Witness Signature</u>: At the end of the letter, be sure to denote "Signed by:" and that each aspect of the signature is on a separate line:

Sincerely.

Gregory C. Wilshusen Director Information Security Issues:

Should read:

Sincerely,

Signed by:

Gregory C. Wilshusen:

Director:

Information Security Issues:

- 7. <u>Appendices</u>: Appendices often are missing colons after the Appendix number. Be sure to insert them.
- 8. <u>GAO Mission</u>: In most reports, the script will place the "GAO's Mission" section prior to the FOOTNOTES in the text version.
 - a. If this occurs, delete "GAO's Mission", so that FOOTNOTES come immediately following the last appendix. However, any dropped footnotes will appear after the misplaced "GAO's mission" and prior to FOOTNOTES. When deleting the extraneous "GAO's Mission" check to make sure that the Managing Director for Public Affairs is the last thing deleted. If there is text between this information and the FOOTNOTES header, that text is a misplaced footnote.
 - b. Open the PDF version of the report and search for this footnote.
 - c. When you find it, make sure that numbering is continuous for the entire report. Often, chapter reports and other uncommon types of documents renumber footnotes in each section. In text files, we number consecutively for the whole document. For example, Footnote 3 of Appendix II could be Footnote 57 in the text file. If you suspect this is the case, find where in the PDF the actual footnote appears (in the text of the report). Then find the corresponding [Footnote XX] citation in your text file. This will be the number of the footnote.
 - d. Once you have determined the footnote number, insert the misplaced footnote into the appropriate place within FOOTNOTES, then renumber each subsequent footnote accordingly.
 - e. Denote "Footnotes" in the NOTES section of your statistics.
- 9. Text Characters: Run a global search/replace text editing:

Table 3-4 Text Characters for Replacement

Find:	Replace with:
1_	1
	-
и. •	ш
.).	.)
.);	.)
.):	.)
.;	;
:;	:_ (2 hard returns)
.*	: * (colon/space/hard return/asterisk)

;; (semicolon/space/semicolon/space)	(period/space/2 hard returns)	
: (hard return/new line starts with colon)	2 hard returns	
(hard return/new line starts with space)	2 hard returns, no space	
3 hard returns	2 hard returns	
Double space	Single space	

There should never be more than two hard returns between paragraphs, and on a blank line of text, no text or spaces should exist.

- 1. Spacing: To insure a space after each punctuation mark that ends a paragraph or block of text:
- 2. Search for 2 hard returns.
- 3. Replace with a single space, followed by 2 hard returns.
- 4. Search for double spaces.
- 5. Replace with single space.
- 6. Repeat until all double spaces are eliminated.
- 7. Spelling: Run the Spell Checker.

Note: GAO often uses secondary and unconventional spelling of words and does not uniformly use hyphens. Consult a dictionary to determine alternate spelling of words; do not rely solely on the Spell Checker.

3.6.7 Final Steps

- 1. Go to Convert > Wrapping > Line Breaks.
- 2. Select "Left Margin" and click OK, and then save.
- 3. Copy final text file to appropriate repository, currently:

U:\For_Printing\Accessibility (final ASCII files)\[Current Fiscal Year]

3.7 Processing Comptroller General Briefings and Other PowerPoint Files

We process accessible versions of the slideshow presentations that accompany speeches given by the Comptroller General. In addition to the usual PowerPoint processing described earlier, we also process the data contained in charts and figures.

Note: These directions apply to PowerPoint slideshows located in regular audit products as well.

Tables

Slideshow tables are usually small enough to recreate manually (by copy/paste or retyping). Under most circumstances, they may be copied into Excel and recreated as described above.

2. Charts

Check the most recent version of the U:\Web Posting\Accessibility\SRA\Image library text file to see if a particular chart has already been processed (the notes to charts usually contain the version or date). If a chart has previously been created in accessible version, you can copy/paste to your document.

The Comptroller General's PowerPoint presentations should contain embedded tabular data beneath each bar, line, or pie chart, which we can then process using Excel/Word.

- 1) Double click on the chart in the latest version of the PPT file.
- 2) Copy the spreadsheet that contains the data.
- 3) Paste into Excel.
- 4) Follow the Excel/Word procedures listed above.

The following must follow the title of a processed chart and precede the data:

[Refer to PDF for image: (describe type of graph here)]

3. Bulleting

Comptroller General briefing slides occasionally use varying levels of bulleting to illustrate key points. For example, see the following slide:

Figure 3-27 Comptroller General Briefing Slide

The "Status Quo" is Not an Option trends and rising health care costs.

- We face large and growing structural deficits largely due to known demographic
- GAO's simulations show that balancing the budget in 2040 could require actions as large as
 - . Cutting total federal spending by about 60 percent or
 - · Raising taxes to about 2.5 times today's level

Faster Economic Growth Can Help, but It Cannot Solve the Problem

- Closing the current long-term fiscal gap based on responsible assumptions would require real average annual economic growth in the double digit range every year for the next 75 years.
- During the 1990s, the economy grew at an average 3.2 percent per year.
- As a result, we cannot simply grow our way out of this problem. Tough choices will be required.

The Sooner We Get Started, the Better

- Less change would be needed, and there would be more time to make adjustments.
- The miracle of compounding would work with us rather than against us.
- Our demographic changes will serve to make reform more difficult over time.

Source: Comptroller General Briefing to 28th General Assembly of the International Social Security Association, September 17, 2004.

This slide uses three levels of bullets. To make things less confusing for visually impaired users, always eliminate the top level of bullets.

The line The "Status Quo" is Not an Option would not have bullets in the accessible version. The top-most bulleted line would begin with "We face large and growing structural deficits..."

Use an asterisk (*) for the top level of bullets in a list, and a dash and space (-) for the second level. Should a third level exist, use the asterisk again.

The punctuation of an accessible bulleted list should indicate the appropriate parent-child relationship between the items. For example, in the list above, there should be a colon after The "Status Quo" is Not an Option to indicate that subsequent items are related to this point. The same would hold true for the line that begins, GAO's simulations show that balancing...

4. Other Briefing Notes

- a. Because the accessible text version of a slideshow is considerably shorter than the actual PowerPoint file, it is unnecessary to repeat the section header at the top of each slide. One mention of each section header (i.e. Introduction, Scope and Methodology, Chapter 1, etc) is sufficient.
- b. Many items in bulleted lists lack punctuation; insert a comma for items in a bulleted list, with a period following the last item in the list. Replace all unnecessary or warranted colons with the appropriate punctuation
- c. For all other aspects of slideshow processing, formatting should be the same as with a regular document.
- d. At the end of the slide presentation, [End of slide presentation] should be inserted.

3.8 Work Tracking

After completing the text file processing, update the ITSM ticket and Work Tracking spreadsheets.

- 1. Update the ITSM assignment by doing the following:
 - a. Fill in the Target Date Time, Estimated Effort, and Actual Effort fields accordingly as in the figure below.
 - b. Accept and complete the assignment.

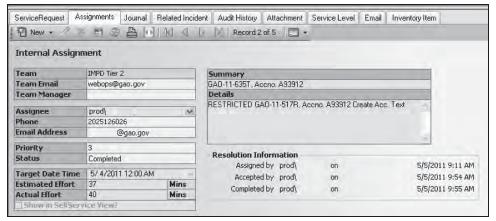


Figure 3-28 ITSM Assignment for Accessible Text

Target Date
Time, Estimated
Effort, and
Actual Effort
fields.

- 2. Update the U:\Web Posting\Accessibility\SRA: Report Processing log FYxx.xls spreadsheet.
 - a. On the Report Processing Log (RPL) tab, record the following information on the left into the spreadsheet as depicted in Figure 3-29:

Figure 3-29 Work Tracking Spreadsheet

Daybook date: Date report was posted

File number: in dFYPRDCT.No format

Process by: your name

Status: done, in process, waiting on source files, etc.

Date finished: Date processing was completed

Posted to PMR: date file was posted via PMR

Processing time: start to finish for creation of text file

MRT: Maximum response time: turnover time: 0.5 for same date as daybook; 1 day, 2 days, etc. Contract specifies a 3 day MRT.

Wait time: length of time in days awaiting source files

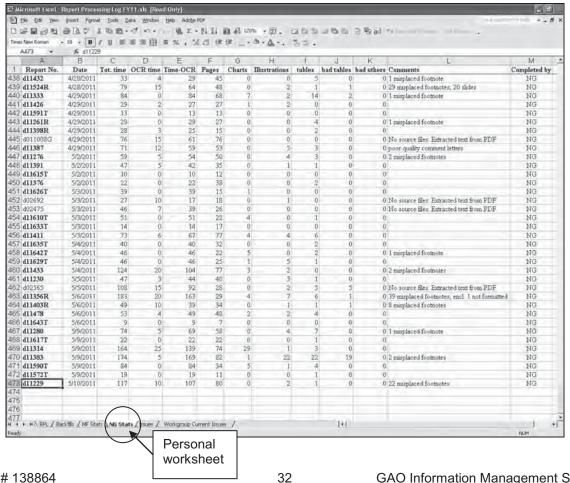
Weekly report: color coded grouping of files processes in weeks for reporting purposes

Notes: unusual circumstances: non-daybook, reissue, etc. (Column to the right of the Weekly Report column.)

□ 20 日 20 日 30 日 30 日 30 日 30 日 30 日 30 日										
	A	В	С	D	E	F	G	Н	1.1	J
1	Daybook	File Number	Processed by	Status	Date finished	Sent to WebOps	Processing time	MRT	Wait time/days	Weekly Report
381	5/2/2011	d11261R	J. Doe	Done	4/29/2011	5/2/2011	29	0		
382		d11387	J. Doe	Done	4/29/2011	5/2/2011	71	0		
383		d11276	J. Doe	Done	5/2/2011	5/2/2011	59	0		
384	5/3/2011	d11591T	J. Doe	Done	4/29/2011	5/3/2011	13	0		
385		d11391	J. Doe	Done	5/2/2011	5/3/2011	47	0		
386		d11376	J. Doe	Done	5/2/2011	5/3/2011	22	0		
387	5/4/2011	d11626T	J. Doe	Done	5/3/2011	5/4/2011	39	0		
388		d11610T	J. Doe	Done	5/3/2011	5/4/2011	51	0		
389		d11633T	J. Doe	Done	5/3/2011	5/4/2011	14	.0		
390		d11411	J. Doe	Done	5/3/2011	5/4/2011	73	.0		
391		d11642T	J. Doe	Done	5/4/2011	5/4/2011	46	0		
392	5/5/2011	d11629T	J. Doe	Done	5/4/2011	5/5/2011	46	0		
393		d11433	J. Doe	Done	5/4/2011	5/5/2011	124	0		
394		d11230	J. Doe	Done	5/5/2011	5/5/2011	47	1		_
395		d11356R	J. Doe	Done	5/6/2011	5/6/2011	183	1		
396	5/6/2011	d11478	J. Doe	Done	5/6/2011	5/6/2011	53	0		
397		d11403R	J. Doe	Done	5/6/2011	5/6/2011	49	0		
398	5/9/2011	d11280	J. Doe	Done	5/9/2011	5/9/2011	74	0		
399		d11383	J. Doe	Done	5/9/2011	5/9/2011	174	0		
400		d11314	J. Doe	Done	5/9/2011	5/9/2011	164	0		
401	5/10/2011	d11617T	J. Doe	Done	5/9/2011	5/10/2011	74	0		
402		d11648T		-						
403		d11657								
404		d11229	J. Doe	Done	5/10/2011	5/10/2011	117	0		
405				A STATE						
406										
	5/11/2011	d11645T								
408		d11643T	J. Doe G Stats / Issues / V	Done	5/6/2011	5/11/2011	9	0		

- b. Record the following information under the worksheet with processor's initials:
 - **Report Number**: The report number in the d format.
 - **Date:** The date you finished processing the document.
 - **Tot. time**: Total number of minutes spent processing this file.
 - **OCR time**: Total number of minutes spent processing PPT or comment letters.
 - Time-OCR: Total time minus OCR time.
 - Pages: The page number of the last numbered page of the document.
 - Charts: Any graphical element that features statistical information or describes a flow or procedure (list total number of).
 - Illustrations: Maps, photographs, drawings that depict something other than statistics (list total number).
 - Tables: Data presented in table format that appears in the text file as text (list total number).
 - Bad tables: Number of tables that were either impossible or required unreasonable amount of time to process due to poor translation by script.
 - **Bad others**: Number of appendices omitted due to format or poor translation.
 - **Comments**: Abbreviated notation of any delays/difficulties in processing.
 - Completed By: Initials of person who processed the document.

Figure 3-30 Personal Work Tracking Spreadsheet



Section 4 Re-issues

Recalls are the official GAO process for correcting errors in reports' records and PDFs on the web. For instance, if there is broken link on the PDF displayed on the web, the Recall process is the official process of correcting the mistake in the PDF, Accessibility file and the Database and then reposting the corrected file to the website, sometimes with an errata statement.

4.1 Reissue Notification

Tier II staff receives a recall and reissue notification e-mail from Distribution staff.

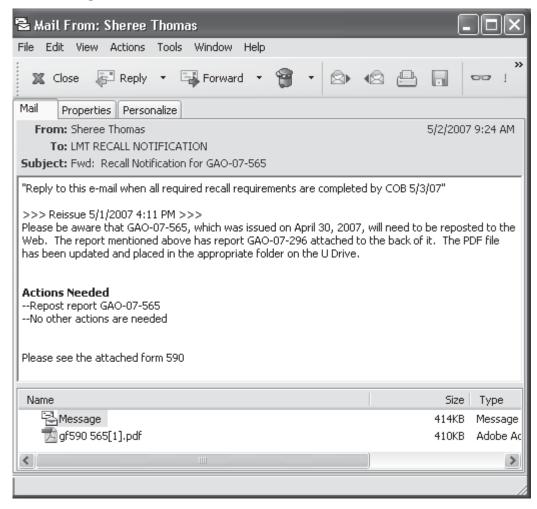


Figure 4-1 Recall and Reissue Notification E-mail

The Information Management staff review the GAO Form 590 (in PDF format) which is attached to the recall and reissue notification e-mail.



Figure 4-2 GAO Form 590

4.2 Types of Action

After reviewing the directions in the GAO Form 590, Information Management staff takes the corrective actions described in the GAO Form 590. These corrective actions include:

- Correcting product metadata (for the recalled and reissued product) stored in the Product Metadata Repository (PMR) GAO document databases (DocDB and DocDBLite).
 - Examples of such corrections are the following: updating product title, updating product issue date, and updating product abstract with supercession data;
- Correcting file format and file metadata of electronic versions of the recalled and reissued product.
 - Examples of such corrections are the following: updating PDF metadata (product number, product title, and issue date), updating PDF file optimization settings, and updating text in the accessible text version of the recalled and reissued product.
- Post the corrected product metadata of the recalled and reissued product to the GAO website.
- Post the corrected electronic versions (PDF, text) of the recalled and reissued product to the GAO website.
- Post listserv (e-mail) notifications regarding the recalled and reissued product to listserv subscribers.

4.3 Procedures for Actions

Below are specific steps to correct and post reissue/recalled products via PMR:

4.3.1 To correct product metadata

1. Login to the PMR website: http://pmr.gao.gov/.

The Login page below appears.

- 2. Login by typing in the following for the fields:
 - Login: User's NT login name.
 - Password: User's PIN + 6-Digit RSA Token Number.

Figure 4-3 PMR Login Screen



3. Select the **Find an Existing Product** on the Dashboard under Common Tools and type in an identifying number or title for the publication product in the search field.

Note: Make sure that the record you select in the search results is a Publication type record.

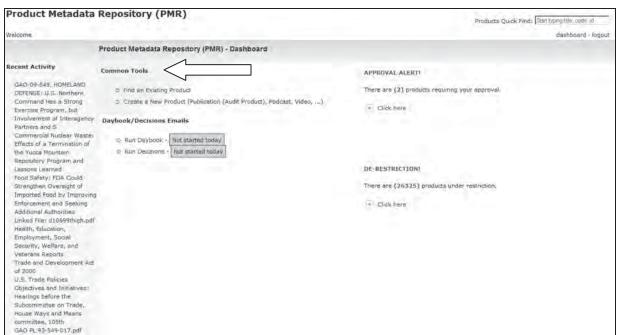
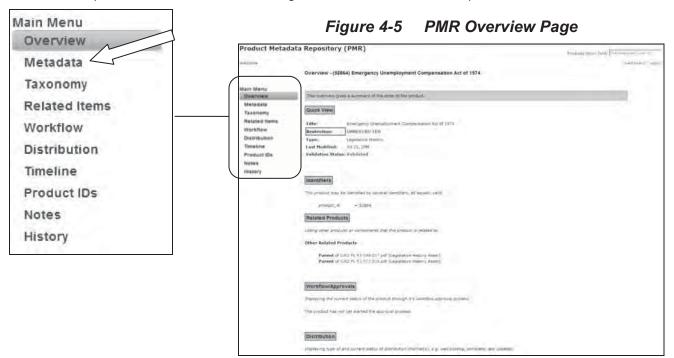


Figure 4-4 PMR Dashboard

Compensation Act of 1974

4. In the publication record's Overview Page, select Metadata in the left panel menu.



- 5. Make any necessary changes to the product metadata (document issue date, description text, product title, etc.)
- 6. Save the Metadata page.
- 7. Select the Distribution tab on the left.
- 8. Push the Re-Run Now action button for the WWW [PROD] Distribution channel.

This will refresh the product's page on the public website with the new information.

4.3.2 To correct PDF metadata

- 1. Make the necessary changes to the PDF metadata via Adobe Acrobat.
 - In Acrobat, open the PDF and go to File > Properties > Summary to open the Document Properties.
- 2. Save the PDF.
- 3. Close out of the PDF.
- 4. Re-run the batch scripts for web viewability (see note under section 7.3.2.2.1).
- 5. To update the public site with corrected product metadata, upload the new PDF to the parent record in PMR by following the directions outlined in section 4.3.3 below.

4.3.3 To post corrected PDF file

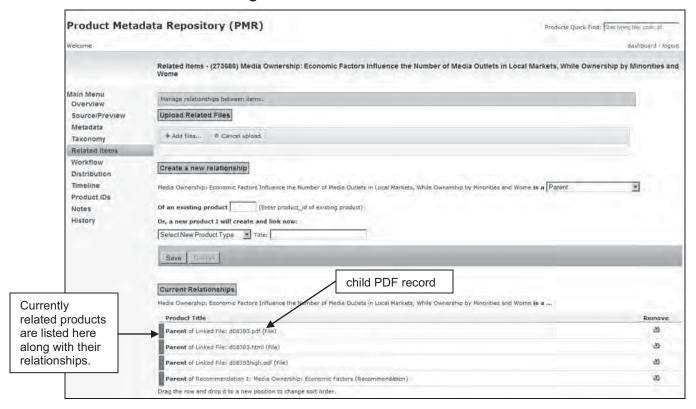
1. In PMR, search for the publication record for the audit product.

This is the record that will be related to the PDF record as a parent.

2. In the publication record, select Related Items.

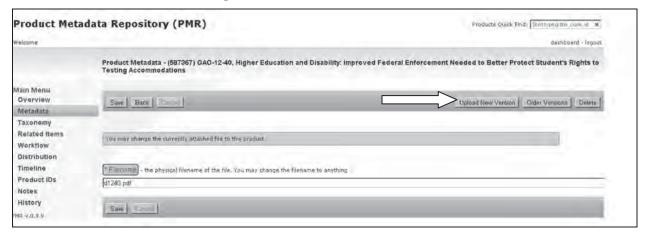
3. In the Related Items page, at the bottom of the screen, select the record of the original PDF.

Figure 4-6 PMR Related Items tab



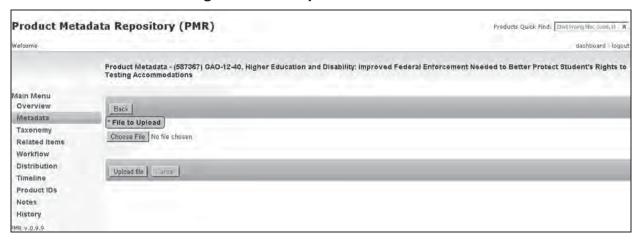
- 4. In the PDF record, select **Edit this attachment**. (See Figure 4-9.)
- 5. Select Upload New Version.

Figure 4-7 PDF Attachment



6. Click Choose File and select the file from your computer.

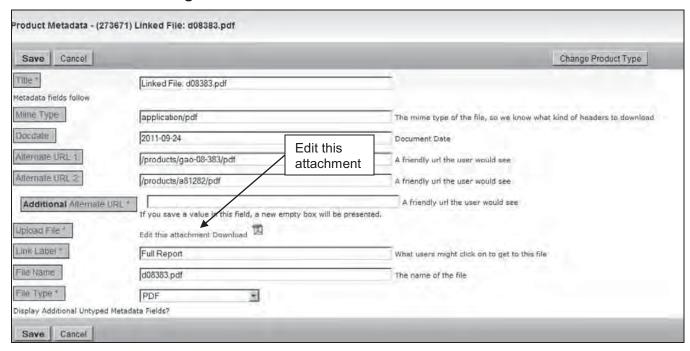
Figure 4-8 Upload Attachement



- 7. Select Upload File.
- 8. Once the new version is uploaded, verify/update the Metadata page according to the following elements:
 - Title: Pre-populated; based on file name type
 - Mime Type: Pre-populated; based on file name type
 - Docdate = Date of letter of the product in YYYY-MM-DD format
 - Alternative URL 1: Leave blank; applied by PMR
 - Upload File: Pre-populated; the file attachment
 - Link Label: Full Report
 - File name: File name of PDF file
 - Ex: d08383.pdf
 - File Type: PDF

Below is an example of a populated metadata page of a PDF child record:

Figure 4-9 PMR Metadata of PDF File

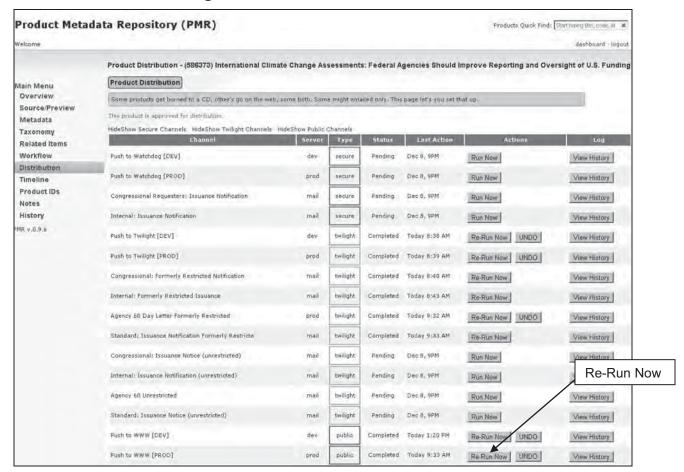


9. Once the record is complete, go back to the publication parent record and select the Distribution tab.

10. Re-push the distribution **WWW [PROD]** by selecting the Re-Run Now action button.

This will upload the new version to the public website.

Figure 4-10 PMR Distribution tab



4.3.4 To post listsery notification for reissued product

Add a line to the Daybook listserv message with the heading "Reissued Product."

To see how to process the Daybook listserv message, see Section 10.

4.4 Notification of Completion

As each corrective task associated with the recall/reissue is completed, the Information Management staff who completes the task notifies (by e-mail) the Distribution staff that the corrective task (database update, PDF file preparation and web posting, listserv notification) has been completed. Once Distribution staff has received notification that all electronic distribution related and database related updates have been completed, Distribution staff updates the recall-tracking database to indicate the completion of these corrective actions for the recall and reissue.

Section 5 Taxonomy

Taxonomy is a system for naming and organizing concepts or objects that share similar characteristics into groups.

The Teragram Services are the commercial off-the-self services purchased from SAS/Teragram in FY 2010. The services perform the document conversion, categorization, concept and fact extraction, and summarization functions. These services take the rules developed by the GAO Taxonomy Manager using the SAS/Teragram Content Categorization Studio (also referred to by the name of its user interface: "tk240") to process documents and return their categorization and extracted concepts/facts. The categories that are returned comprise the GAO taxonomy.

Large volumes of documents can be parsed, analyzed and automatically categorized based on predefined rules, through the SAS Content Categorization application. The new processes that support rulebuilding and categorization functions are described in this section.

5.1 Content Categorization

5.1.1 Access to SAS Content Categorization Studio (tk240)

The SAS Content Categorization Studio is the platform used by the Taxonomy Manager to create and maintain the categorization rules defined for the various GAO products.

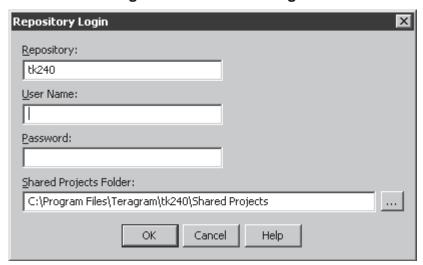
The user will follow this sequence of steps to ensure that the most current categorization rules are accessed each time tk240 is opened:

- 1. Go to Start Menu and select run.
- 2. Type mstsc and click OK.
- 3. The Remote Desktop Connection box will pop up. Computer should equal: wasTK240dev.prod.gao.gov
- 4. Click Connect.
- 5. Open tk240.
- 6. Click Edit > Options.
- 7. Check the checkbox labeled "Automatically update project when opened."
- 8. Click OK.

5.1.2 Opening a Project in Teragram

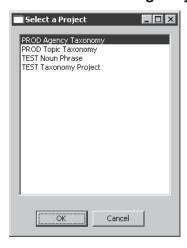
When the user launches tk240, the following dialog box appears.

Figure 5-1 tk240 Login



- 1. Enter User Name and Password.
- 2. Click OK.

Figure 5-2 Selecting Project



- 3. Select a project.
- 4. Click OK.

5.1.3 Creating Rules

Categorization in Teragram is based on rules that determine whether the subject matter of a document or product matches the topic specified by one of the Category rules. When you create a new project in Teragram, the user specifies the subject matter areas which are the Categories in your project. After the user has specified their Categories, the user must write the rules that match the subject matter or input documents. Accurate rules match all of the relevant documents, but do not match irrelevant documents. These rules will determine whether or not a certain document should belong in a particular category or topic. These rules are tested and submitted for QA to ensure accurate results.

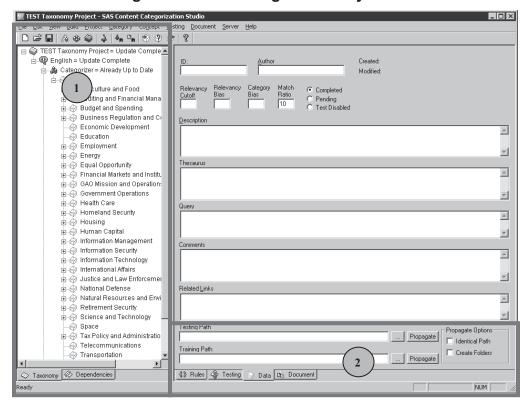
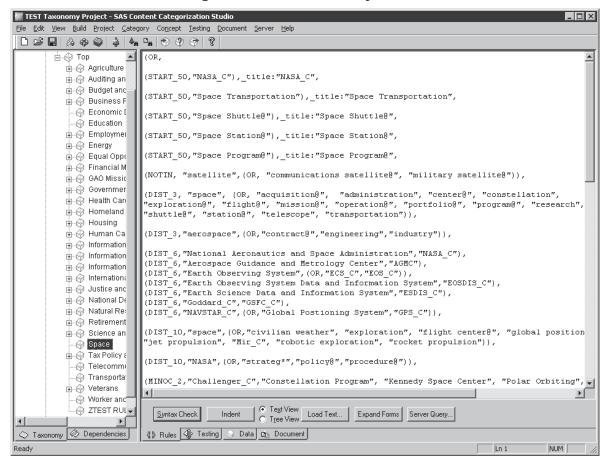


Figure 5-3 Writing Taxonomy Rules

- 1. In the Taxonomy window on the left:
 - a. Open Categorizer node by clicking the "+" icon.
 - b. Open Top node by clicking the "+" icon.
 - c. Highlight Top.
- 2. In the Data and Rules window on the right:
 - a. Click the "Data" button to display the interface fields in the Data window.
 - b. Click the "..." button to select a directory containing the desired documents.
 - c. Click the "Propagate" button to map each Category in the taxonomy to a folder in the directory.

3. Highlight the desired category in the Taxonomy window then click the "Rules" button to display the associated category rules.





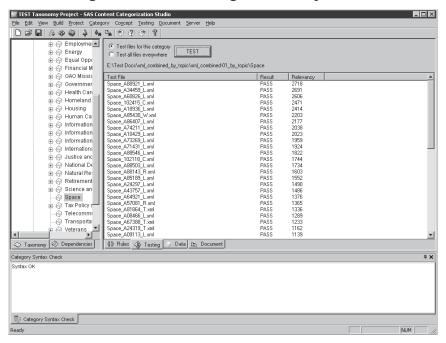
Note: There are two types of rules – linguistic rules and Boolean rules. The Rules window contains a list of unique terms (linguistic rules) that identify a Category, the terms combined with the Boolean operators that constrain those terms (Boolean rules), or a combination of the two types of Category rules.

4. Click the "Testing" button to view the list of test documents. Then, click the "Test" button to execute the rules against all of the documents within the selected category.

As shown below, the right panel displays the result status (i.e., pass or fail) and the relevancy score for all documents.

5. Double-click a document name to open it.

Figure 5-5 Testing Taxonomy Rules



As shown below, the right panel displays the document content with matched terms highlighted.

Ele Edit Yew Build Project Category Concept Testing Document Server Help

D 😅 🖫 🔉 🕸 🕸 🗳 🎄 🎝 🌬 🅦 🖰 😲 😌 🕞 Employmer | September | Septem Information Information Report to the Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia, Committee on Homeland Security and Governmental Affairs, U.S. Senate Internationa ⊕-⊹ Justice and ⊕-⊹ National De NASA Progress Made on Strategic Human Capital Management, but Future Program Challenges Remain - A Natural Re: GAD-07-1004 Retirement Space Tax Policy at Telecommi -liahliah PASS Transporta Veterans 1 | F | Category Syntax Check Category Syntax Check Ln 24 NUM

Figure 5-6 Taxonomy Test Results: Matching Terms

6. Select the "All categories" radio button and click the "Test" button.

In the pop-up, all categories where matches were found for the selected document are displayed. Also shown is the relevancy score (highest to lowest) for each matched category.

Figure 5-7 Taxonomy Categories / Relevancy Scores

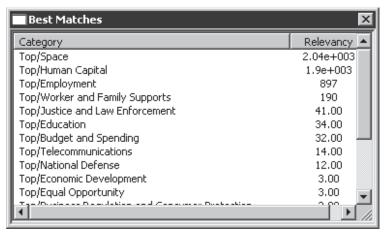
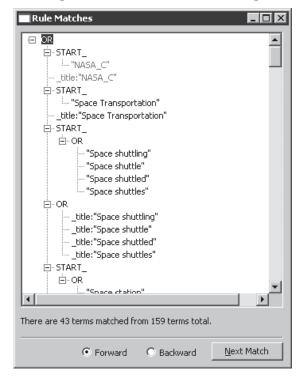


Figure 5-8 Rule-Matching



7. Click the "Selected category" radio button and check "View Rule Matches".

In the pop-up, all of the matched terms within the document are displayed.

The Taxonomy Manager will continue to update and test the rules until the pre-defined success criteria have been met.

5.2 Concept Extraction

Terms, programs, laws and other pieces of information contained in a GAO product are extracted from the text of the product in the following three ways via the Teragram tool:

- <u>Classifier</u> "A classifier can be a word, or a string that must be matched in the input document."
 (SAS Content Categorization Studio 5.1: User's Guide)
- <u>Grammar Rules</u> "Grammar rules enable you to identify the metadata of input documents based on parts of speech and other grammatical constructions. Unlike classifier Concepts, use grammar rules to identify facts, even if you do not know them." (SAS Content Categorization Studio 5.1: User's Guide)
- Regular Expression "Regular expressions enable you to specify the known formats and their variations and to return all of these matches without specifying individual strings." (SAS Content Categorization Studio 5.1: User's Guide)
 - With such pattern matching you can extract statutes of laws with a specific nomenclature and numbering, e-mail addresses or phone numbers.

NOTE: The "SAS Content Categorization Studio 5.1: User's Guide" provides details of how to use the tool. To access it select Help in the menu bar of the window.

PROD Concept Extraction - SAS Content Categorization Studio File Edit View Build Project Category Concept Testing DER 400 4 4 5 + 2 + 2 Help link @ PROD Concept Edraction = Update Complete Department of Agriculture, ■
 English = Update Complete Department of C ☐ Concepts = Update Complete E D Top Department of Defense, Department of Economics, Department of Education, ⊆ Agency Executive Department of Energy, 2 Independent Agencies Department of Engineering, Department of Health and Human Services, Department of Homeland Security, Department of Housing and Urban Development, Department of Housing and Urban Development, ⇒ Judiciai Legislative @ Multinational @ Non_Federal_Orgs Terminated Department of Labor, Department of Political Science, Department of Security Institute, @ Territories ∠aws
 Department of State, E & People Department of Transportation · PERSON Department of Veterans Affairs, a (2) POLITICAL_FIGURE Department of the Air Force, Department of the Army, Department of the Interior, - @ Place Programs 2 Civilian Department of the Navy, Department of the Treasury, - International Departmental Administration C Military Departmental Appeals Board, Dependents Schools\c Europe, Dependents Schools'c Pacific, Depot Maintenance Activity Group, Deputy Chief of Staff for Intelligence, Deputy Under Secretary for Trade Security Policy, Deputy Under Secretary of Defense (Logistics), Des Noines Flight Service Station, Desert Test Center\c Ft. Douglas\c UT, Detroit Area Office\c HI, Detroit Computing Center\c Detroit\c MI, Detroit District\c MI, Dewitt Army Hospital\c Fort Belvoir\c VA, Die Manufacturing Division, Diplomatic Courier Service, Directorate for Freedom of Information and Security Review, Directorate of Administration and Hanagement, Directorate of Administration, Directorate of Administrative Programs, Directorate of Border and Transportation Security, Directorate of Emergency Preparedness and Response, Directorate of Information Analysis and Infrastructure Protection, Directorate of Legislative Limison, Directorate of Management, Directorate of Plans and Systems Directorate of Science and Technology, Syntax Check Taxonomy Dependencies (1) Definition (2) Testing Date Dt. Document

Figure 5-9 Teragram: Concept Extraction Module

As shown in left panel view of Figure 5-9Teragram: Concept Extraction Module above Teragram extracts the following types of concepts to describe GAO products. Each type of concept is further broken down for specificity.



Figure 5-10 Concept Extraction Entities

- Agency organizational entities
 - Executive federal organizations that fall under the President and his cabinet secretaries and are tasked specifically with enforcing federal laws and administering the federal bureaucracy
 - Independent Agencies federal organizations that operate independently of the three core branches of the federal government in a regulatory or supervisory capacity over some area of human activity
 - Judicial the various federal judicial courts (Supreme Court, Lower Courts, Special Courts) and their supporting organizations
 - Legislative federal organizations that are part of or support the law-making body of United States government, the Congress
 - Multinational organizations that involve participation among more than one country
 - Non_Federal_Agency organizations not affiliated with the federal government, such as private companies, state government agencies, and universities
 - Terminated organizations that no longer exist
 - Territories land holdings governed by the U.S. government whose political and legal status sets them apart from states and commonwealths
 - Currently, the United States holds three territories: American Samoa and Guam in the Pacific Ocean and the U.S. Virgin Islands in the Caribbean Sea

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- Laws federal laws passed by Congress and signed by the President
- People –Persons mentioned in the product
 - Person specific individuals mentioned in the text of a product
 - Political Figure Specified elected and appointed government officials such as governors, state and U.S. senators, and cabinet secretaries.
- Places geographic entities such as regions (Sahara desert), lakes (Lake Erie), and mountains (Mt. Everest) mentioned in the product
- Programs specific government initiatives and tasks spearheaded by government agencies as a response to legal mandates or organizational mission protocol
 - Civilian programs and projects related to non-military initiatives
 - International programs sponsored by international organizations or involving different countries
 - Military programs related to Department of Defense operations

5.3 Thesaurus Tool

MultiTes Pro software is a thesaurus construction and maintenance tool that GAO employs for its thesaurus. Teragram utilizes data extracted from MultiTes to create rules for thesaurus term concept extraction from GAO work products.

Some features of MultiTes include:

- Support for ANSI/NISO standard relationships (USE: Use Preferred Term, UF: Used for, BT: Broader Term, NT: Narrower Term, RT: Related Term, SN: Scope Note), as well as user-defined relationships, classifications, languages and note/comment fields
- Support for polyhierarchical thesauri (i.e. multiple category assignment)
- Support for multilingual thesauri. This includes handling of foreign characters (diacritical marks)
- Validation of conflicting relationships
- Output to XML, creates a fully-featured XML file from your thesaurus, suitable for use to interact/interop with other systems.
- Import terms, relationships, or fully-featured thesauri from text files or from clipboard

🔡 MultiTes Pro v2011.01.01 - X:\Local\SRA\Applications\MultiTes\mt2007\data\test\tm_export_baseline_with_cats.th2 <u>File Edit Define Term Reports Window Help</u> Search Child support payments Adv Srch Refresh New term **Y** ⊕ Go! term: [ESC] Clear [Enter] Search Categories Status TNR Flag Relationships BT(2), RT(3), UF(1) Notes Translation Term GovOp, RetSec ENG Civil service pensions A Civil service retirement systel A BT(2), RT(2) BT(2), NT(1), RT(1), UF(1) GovOp, RetSec ENG Civil service system USE(1) ENG SN Civil support BT(1), RT(1) BT(1), RT(2), UF(2) Civil war ENG Civilian employees ENG Civilian personnel BT(1), RT(1), UF(1) NT(7), RT(15) Civilian personnel records ENG SN Claims adjudicators RT(5), UF(1) ENG Claims payment USE(1) Claims processing RT(4) ENG RT(1) Claims processing costs AFm ENG BT(1), RT(2) RT(12), UF(1) Claims reconsiderations SN ENG Claims settlement ENG Clandestine operations Classification of information USE(1) ENG BT(2), RT(3), UF(2) SN Classified defense information A ND ENG Classified documents Classified information BT(1), NT(1), RT(3), UF(4) SN ENG Cleanup of contaminated soil Clearing corporations USE(1) ENG BT(1) Clearinghouse contracts ENG Clearinghouses (banking) BT(1), RT(2), UF(1) SN Fmkt Clearinghouses (futures) BT(1), RT(1), UF(1) SN ENG Clearinghouses (information) A RT(6), UF(1) Clergy Climate BT(1) ENG RT(2) NT(1), RT(6), UF(3) BT(1), RT(5), UF(1) Climate change NRE ENG Climate statistics ENG Climatic change USE(1) USE(1) ENG Climatic fluctuations ENG BT(1), NT(4) Clinical applications ENG Clinical records USE(1) ENG Clinical research Closed-circuit television USE(1) ENG Closed circuit television BT(3), RT(2), UF(2) Tele Clostridium botulinum USE(1) ENG Clostridium tetani USE(1) ENG Clothing allowance BT(1), RT(1) BT(1), NT(1), RT(2), UF(2) Clothing industry BusCo ENG Cloud seeding RT(2), UF(1) ENG BT(1), NT(5), RT(1) Coal Energy BT(1), RT(2) BT(2), RT(5) Coal fields ENG Coal gasification Energy ENG Coal hydrogenation USE(1) ENG BT(1) Coal leases Energy ENG BT(1), RT(6), UF(2) BT(1), RT(3) Coal liquefaction SN Coal mining

Figure 5-11 MultiTes Main Page

5.3.1 Editing Terms

With the Edit options you have the ability to do the following:

- Search for Terms search for terms in he thesaurus
- Check the Number of Terms see the number of terms housed in the thesaurus
- Add Term add a new term to your thesaurus
- Delete Term remove a term from your thesaurus
- Change Term modify the way a term appears in your thesaurus
- Detach Branch move a term from one branch to another such as from Broad Term to its Narrow Term

You also have the core editing functions:

Copy – copy a designated term or sequence of terms in an additional location in the hierarchy

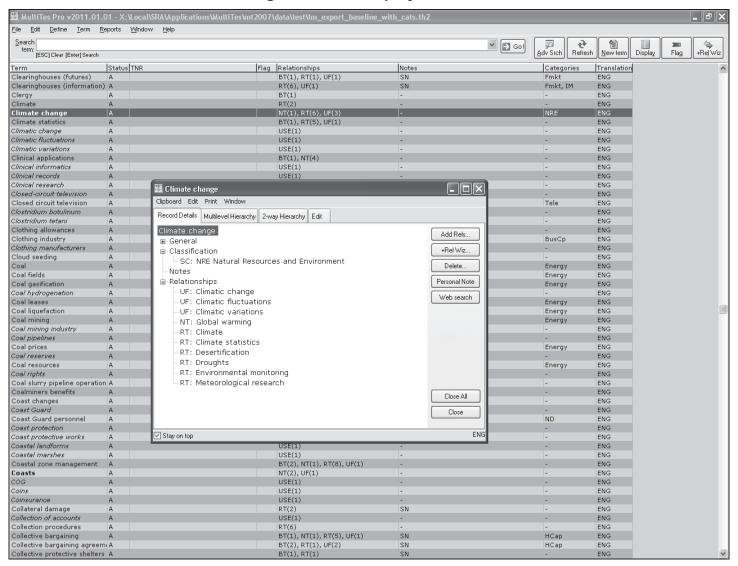
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- Paste replicate a designated term or sequence of terms in an additional location in the hierarchy
- Move change the location of a highlighted term or sequence of terms in the hierarchy
- Undo Deletion reverse a deletion command

To display specific information on a term, double-click it in the Term list.

The Thesaurus list can be viewed hierarchically (according to broad category terms) or alphabetically.

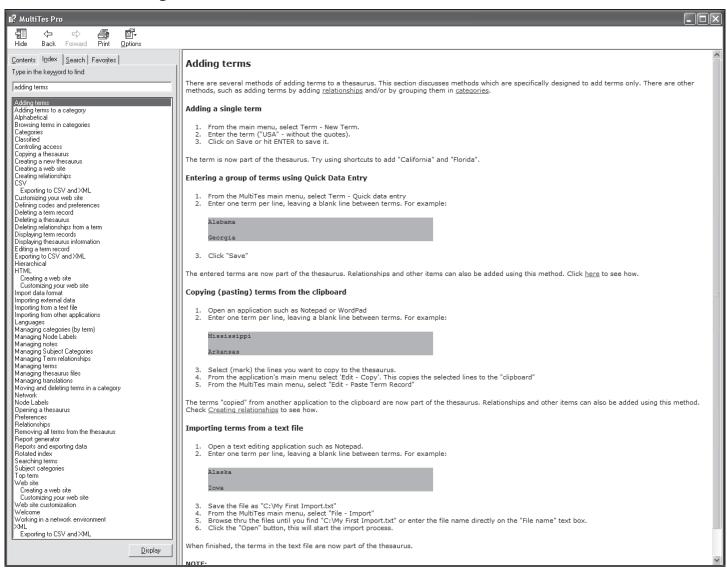
Figure 5-12 Displayed Terrm



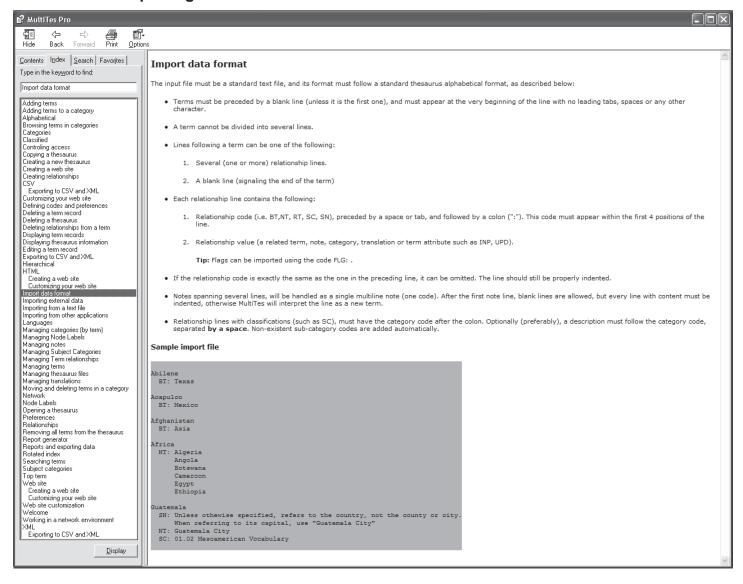
By displaying a term, you can modify its component information such as its relationships with other terms, its classification, and its definition.

The images below show the MultiTes Help Guide of its Add, Import, and Export functions. The guide can be accessed through the Help menu tab at the top of the main screen page.

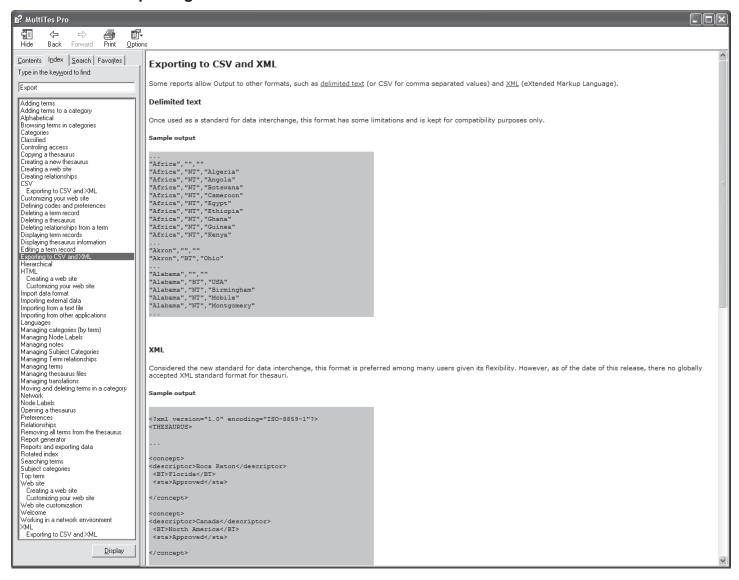
5.3.2 Adding Terms



5.3.3 Importing Formats



5.3.4 Exporting Lists



Section 6 USOrg Process

The **USOrg** database is a repository containing personnel contact information (mailing address, phone number, committee assignments, organizational affiliation, etc.) for Federal Legislative Branch personnel (congressional members, congressional members' staff, committees, and committee staff) and Federal Executive Branch personnel (president, vice-president, and cabinet members). It also contains all the current agencies of the federal government (executive, congressional and independent), and their associated top personnel.

The USOrg Administrator regularly consults **Leadership Directories** to update personnel information; Leadership Directories is an externally maintained online database that contains up-to-date information on all personnel and agencies at the federal level. The USOrg Administrator also makes updates to personnel and agency information by request. The steps below outline the updating process.

Note: Section 6.1 below illustrates how to login and use USOrg and Leadership Directories. Sections 6.2, 6.3, 6.4, and 6.5 cover the specific step-by-step processes of maintaining data on congressional members, congressional committee staff, non-congressional (executive and independent agency) personnel, and organizational information, respectively, in USOrg.

6.1 General Procedures

6.1.1 USOrg Startup Procedures

- 1. Login to USOrg via the following site: http://usorg.gao.gov/usorg-webstart/index.jsp.
- Click "Start Production."

Start Production USOrg Application

Start Test USOrg Application

Tools

Figure 6-1 Initial Option Screen

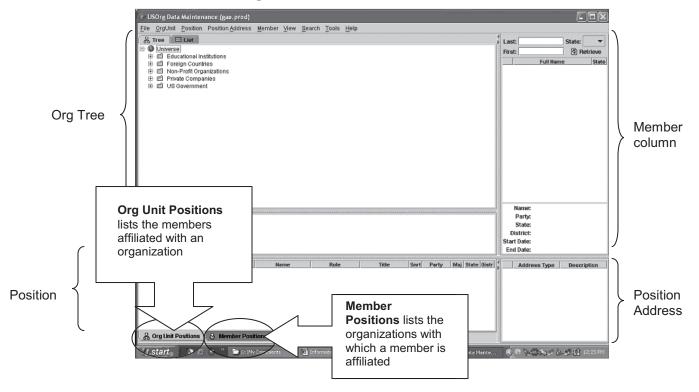
3. Type Login Name and Password. Then click "OK."

Figure 6-2 Login



4. The maintenance screen will then be displayed (Figure 6-3).

Figure 6-3 Maintenance Screen



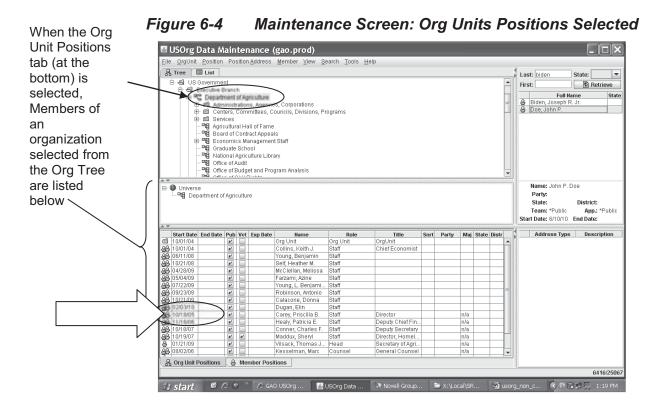
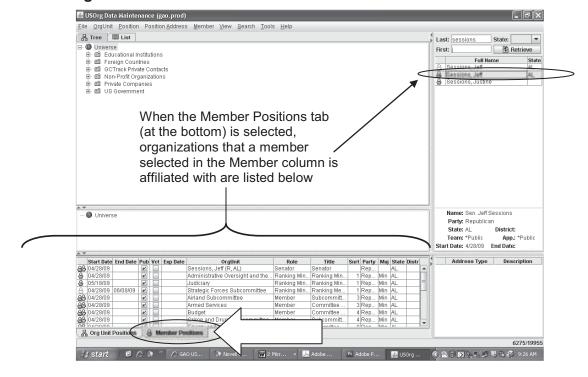


Figure 6-5 Maintenance Screen: Member Positions Selected



6.1.2 USOrg Deletions

1. Select the item in any region of the maintenance screen (see Figure 6-3).

6.1.2.1.1 Right-click and select "Set Inactive."

Note: Never delete except when absolutely necessary. Inactivate instead.

6.1.3 Customizing Leadership Searches

Perform the following procedures to setup Leadership to download the data according to your specific kind and format:

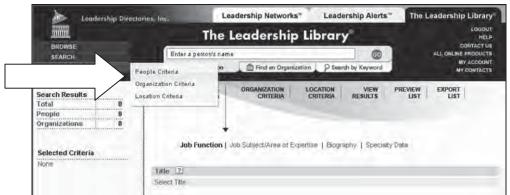
1. Login to Leadership Directory via the Administrator Account.

Figure 6-6 Leadership Login



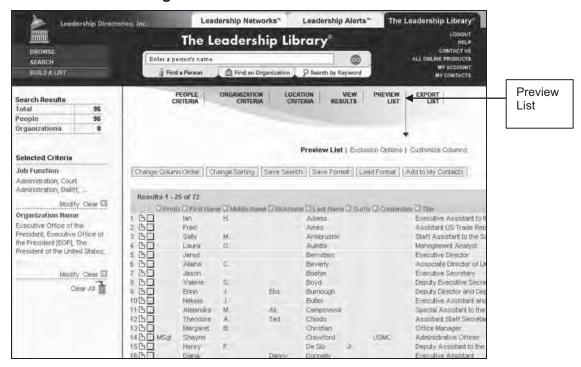
- 2. To customize search, go to Build a List on the left-hand side.
 - a. Under People Criteria, select all the job positions/functions that apply.
 - b. Under Organization Criteria, select all that apply.
 - c. Under Location Criteria, select all that apply.

Figure 6-7 Build a List



- 3. Click Preview List.
- 4. Click Save Format.

Figure 6-8 Preview List



5. For Viewing/Accessing Saved Formats, go to My Accounts > View Saved Formats on the right-hand side.

Leadership Networks* Leadership Alerts" The Leadership Library Leadership Directories, Inc The Leadership Library HELP BROWSE Enter a person's name (6) Load Saved Searches View Recently Browsed Listings View Notes Search The Leadership L View Favorite Listings View Favorite Org Charts View Account Details i Find a Person Find an Organization Modify User Details Customize Starting Screen Enter a person's name Account Administration View Export Statistics View Search History View Saved Formats View Exported Files Press Release Distribution New feature, no additional charge!

Figure 6-9 View Saved Formats

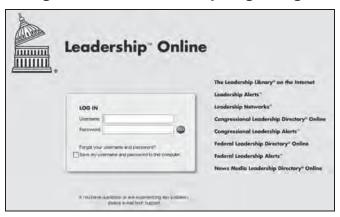
6.2 Congressional Members

6.2.1 General Maintenance Process

6.2.1.1 Download Information from Leadership

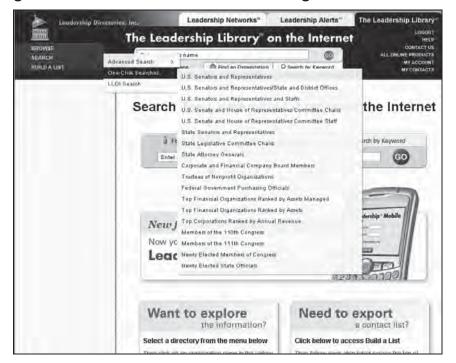
1. Log into Leadership Directory via the Administrator Account (the account used to download records).

Figure 6-10 Leadership Login Page



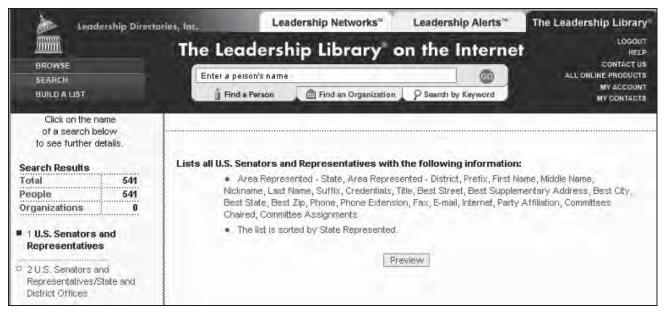
2. On the left-hand bars of buttons, select Search > One-Click Search > U.S. Senators and Representatives (top of the list).

Figure 6-11 One-Click Search for Congressional Members



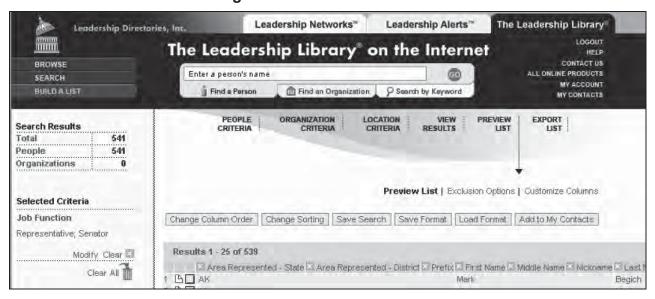
3. Select Preview to display the total number of congressional members in the search results.

Figure 6-12 Preview Search Results



4. Click Load Format.

Figure 6-13 Load Format



5. Under the Load Saved Format, select U.S. Congress (members) and click Load.

Figure 6-14 Load Saved Format

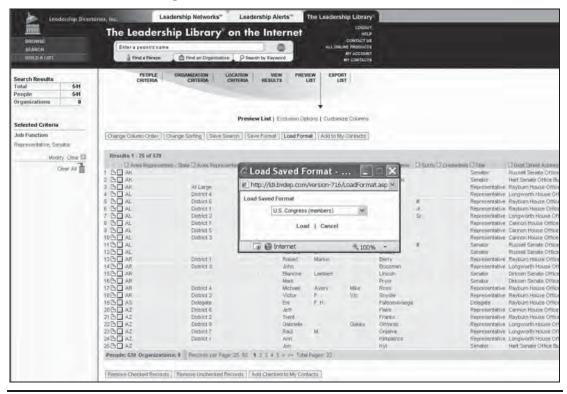
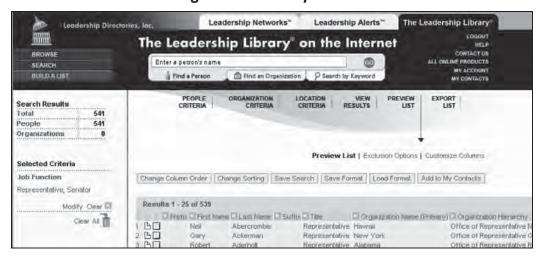


Figure 6-14 illustrates Saved Formats that captures all the data from of the Congress members in a .csv formatted file to hand shape with the Comparison Utility.

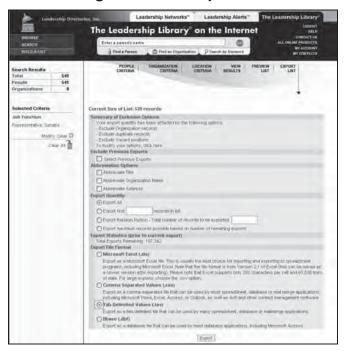
6. Click Export List (below the header bar next to the long arrow).

Figure 6-15 Export List



7. Select Export All, Tab-Delimited Values (.tsv) format, and click Export.

Figure 6-16 Export All



8. Type "U.S. Congress (members)" in rectangular box field and click Export.

Leadership Networks" Leadership Alerts" The Leadership Library on the Internet PEOPLE ORGANIZATION LOCATION YEW PREYEW EXPORT LIST LIST LIST LIST © Export - Windows Internet Explorer Current Size of List: \$78 ress p http://du.bvdep.com/version-716/doexport.asp?balexpabr=8.balexphyse=18.balexphyse=5.balexphyse=18.balexphyse=5.balexphys=5.balex Selected Criteria Sammany of Exclusion Opti Your export quantity has be - Exclude Organization records - Exclude Audicular records - Exclude Viscant positions To mostly your options, click Exclude Provious Exports Job Function Total Experts Remaining 107,342 Size of Current Export 539 Modify Oear D Circlerig "Expert" will extincte the download of your current assection and extonaccally about the total encur-of the export non-your accounts expect statistics. If you go not want to export this tile, passes cosk "Genoral" you have any spections regarding your export statistics, please contact Leadersha Directories, inc. of (212) 527-4140. Seech Previous Exps bbreviette Options Abbreviete Tele Abbreviete Organizati Remember this Export

You can access you support the all any time from the View Exported Files page under My Account, and one
also climent to exclude records in this file from future acports. Type a description of the file in the laws below an
you will be able to laberthy it more early. Object that O Export Plendom Portion Export | Cancel Export Statistics (prior to or Total Exports Remarking 10) Export File Formal Control File Forms

(Microsoft Exect (alls)

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Figure 6-17 Export Window

9. When error notice of firewall comes up in the window, click on the top bar and select download files.

Figure 6-18 Download Error



Figure 6-19 Download File

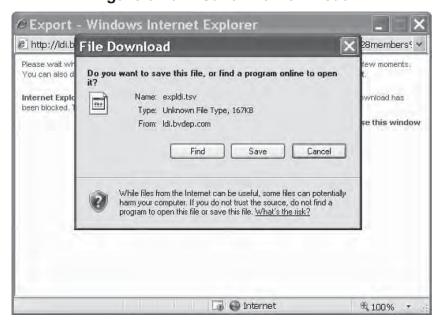


- 10. If connection is slow, close window and re-logon to Leadership Directory.
- 11. Select "My Account" under the top "The Leadership Library" tab.
- 12. Scroll to View Exported files.

Note: Export occurred even though hang-up occurred.

- 13. Select file to download.
- 14. In the File Download window, click Save.
- 15. Save file in the following format: mm_dd_yyyy.tsv under the current month folder (e.g. X:\Local\SRA\INFORMATION MANAGEMENT\Databases\USOrg\Leadership_congressional_information\HouseSenateMember s\2010\February).

Figure 6-20 Save File Download



6.2.1.2 Create USOrg-Leadership data Comparison Input File

 Open downloaded Leadership congressional members file in Microsoft Excel in the 1252: Western European (Windows) format and click next.

Figure 6-21 Export File to Excel

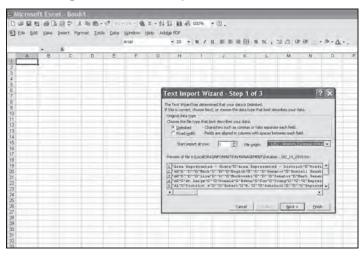
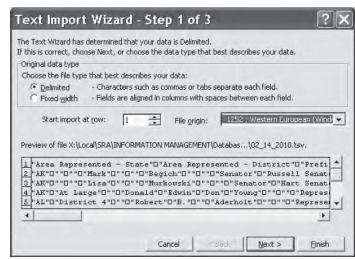


Figure 6-22 Export File to Excel (Detailed)



2. Run the rest of the Text Import Wizard.

Figure 6-23 Import Wizard 2 of 3

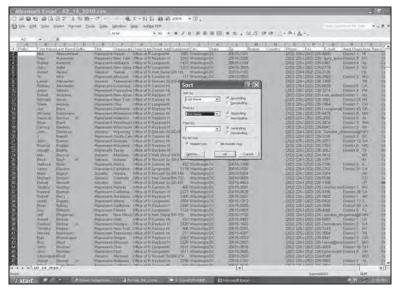


Figure 6-24 Import Wizard 3 of 3



Save File in mm_dd_yyyy name format as a .csv document in the same month folder under "HouseSenateMembers." 4. Sort members in .csv file by last name, first name, and then save file.





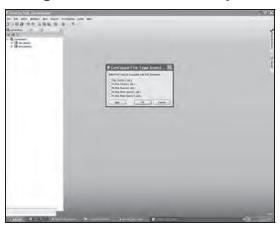
- 5. For applicable first names and last names, replace accented vowels with unaccented vowels (e.g. Andre Carson, Raul Grijalva, Ruben Hinojosa, Ben Lujan, Linda Sanchez, Jose Serrano, and Nydia Velazquez).
- 6. Create ITSM ticket for Oracle Support to "refresh the development instance of the USOrg database production data."
- 7. To create an unpopulated version of the leadership_members table within the Oracle development region, launch SQL*Plus and execute the following Oracle script (the contents of the following text file: X:\local\SRA\information management\databases\usorg\leadership_congressional_information\SQL\usorg_member_script _ddl.txt) by copying and pasting code from the text file into SQL.

Figure 6-26 SQL Script for leadership_members Tables



- 8. To populate the above leadership_members table via SQL Developer, begin by launching SQL Developer.
- 9. On the initial opening page, click OK.





10. On the left hand side bar, expand dev (basic), then expand Tables, right-click Leadership Members and select Import Data.

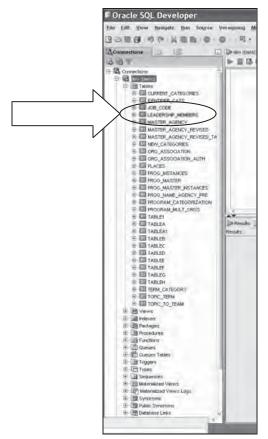
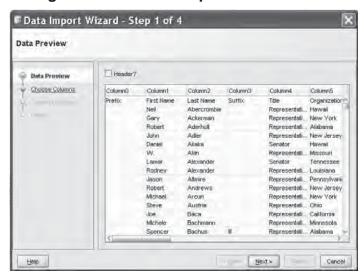


Figure 6-28 SQL Developer Connections Tab

- 11. Locate and open the Leadership member's .csv file.
- 12. Check the Header? box, and run the Data Import Wizard.

Figure 6-29 Data Import Wizard 1 of 4



13. In Step 2, match each Source Data Column with appropriate Target Data Columns.

Figure 6-30 Data Import Wizard 2 of 4

Figure 6-31 Data Import Wizard 2 of 4





Data Import Wizard - Step 3 of 4 Column Definition To Map Source Data to existing Table, for each column on left, select the column in the database table to import this data into Choose Columns Column Definition Table Name LEADERSHIP_MEMBERS Einish Source Data Colum - Target Table Columns Frati: First Name PREFIX Data Type Last Name FIRST_NAME Suffix Size/Precision LAST_NAME SUFFIX Scale Organization Name TITLE Organization Hierar ORGANIZATION_NAME Street Address Comment ORGANIZATION_HERARCHY Supplementary Adc STREET_ADDRESS City Help < Back Next > Cancel

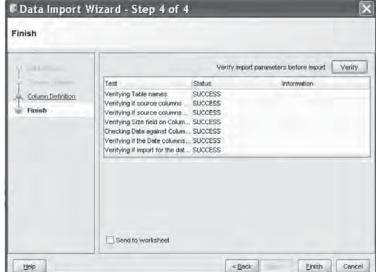
Figure 6-32 Data Import Wizard 3 of 4

14. In Step 4, click Verify.

Figure 6-33 Data Import Wizard 4 of 4



Figure 6-34 Data Import Wizard 4 of 4



15. To save data permanently, type "commit;" in dev (basic) field, and click the green triangle under the tab name.

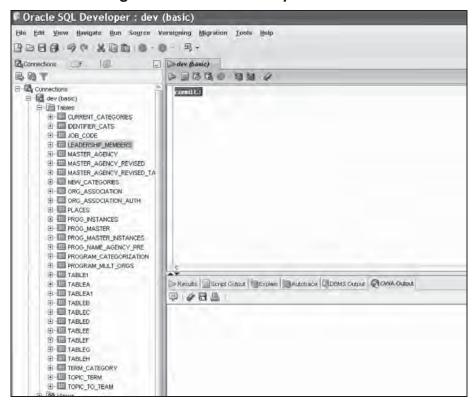
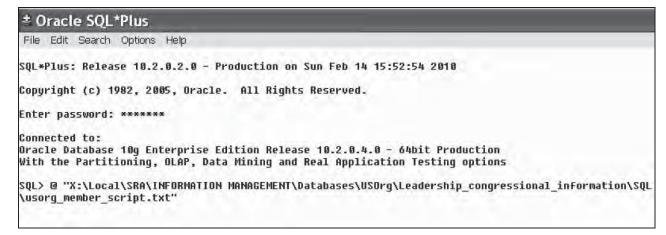


Figure 6-35 Saved Imported Data

- 16. Launch SQL*Plus, and execute usorg_member_script.txt in development instance of SQL*Plus via command saved to following file: X:\local\SRA\information management\databases\USOrg\Leadership_congressional_information\SQL\usorg_member_script_exec.txt by copying and pasting code from the text file into SQL.
- 17. Press Enter on keyboard to execute command.

Figure 6-36 SQL usorg member Script



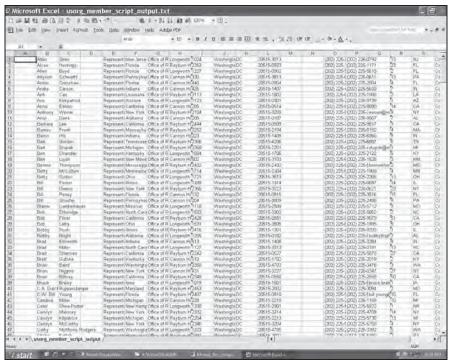
18. Delete all lines that are not '\$' delimited rows from output of usorg_member_script (entitled: usorg_member_script_output.txt). The file path for the output is D:\temp\Text\usorg_member_script_output.txt.

Figure 6-37 SQL usorg_member Script



19. Import usorg_member_script in MS-Excel.

Figure 6-38 Excel Export of usorg_member_script



20. Insert header row from the previous .csv file (path: X:\Local\SRA\INFORMATION MANAGEMENT\Databases\USOrg\Leadership_congressional_information\HouseSenateMember s\2010\January\01 05 2010 script.csv).

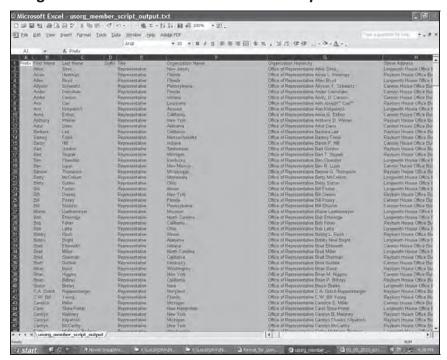


Figure 6-39 Header Row for Excel Spreadsheet List

21. Save as .csv file in mm_dd_yyyy_script.csv name format to appropriate directory (e.g. X:\Local\SRA\INFORMATION

The file will be used as input for the USOrg/Leadership comparison utility.

6.2.1.3 Generate USOrg-Leadership Data Comparison Report

1. On the main login page of the USOrg-Leadership Data Comparison site (https://impd.gao.gov/usorgdiff/Login.do), select Congressional Members and the appropriate Congressional Members .csv file.

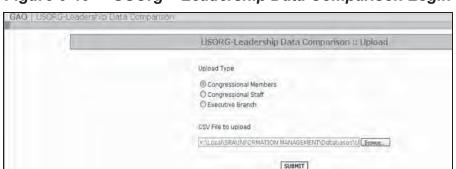


Figure 6-40 USOrg – Leadership Data Comparison Login

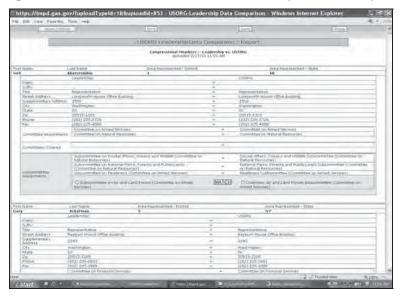


Figure 6-41 Show All Mode for Comparison Report

Figure 6-41 shows records with and without discrepancies are displayed in Show All Mode. Records with only discrepancies are displayed in Show Default mode.

2. Matching Similarities in Report.



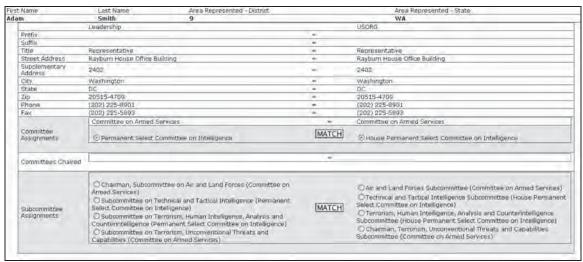


Figure 6-42 Permanent Select Committee on Intelligence for Leadership and House Permanent Select Committee on Intelligence for USORG are selected because they are synonyms. These synonyms will be recognized by the utility after MATCH is clicked.



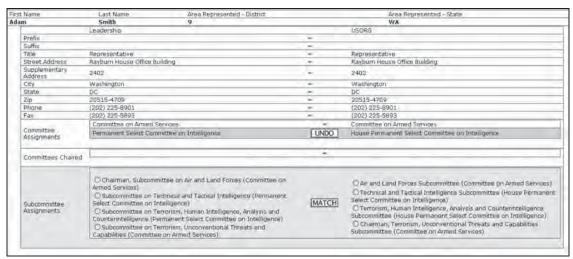


Figure 6-43 Show All Mode for Comparison Report

Figure 6-43 The match can be reversed by clicking the UNDO button.

6.2.1.4 Update USOrg with USOrg-Leadership Data Comparison Report Information

- 1. Once the report has been tailored to the correct display of discrepancies, adjust such discrepancies in USOrg.
- 2. Rerun comparison to check for any additional discrepancies.

6.2.2 Congressional Member Maintenance

Note: Maintenance for Representatives and Senators are Similar

- 6.2.2.1 Adds
- 6.2.2.1.1 How to Add Congressional Member

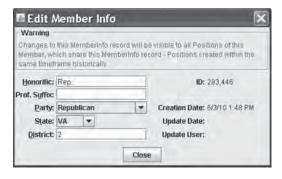
Figure 6-44 Adding New Member



Within USOrg:

- 1. Select Member on the top bar and scroll and select "New."
- 2. Enter First Name, Last Name, Middle Name.
- 3. Select Published.
- 4. Click Edit.





- Add Honorific, Party, State and District (if member is a member of the House of Representatives).
- 6. Click Close.
- On the previous New Member window, click Apply, and then apply OK.

Note: The differences between Senator and Representative are in Honorific and District fields, Senators having Sen. as the Honorific and no District.

6.2.2.1.1.1 Creating a Member Office

1. According to the first initial of last name find the folder with that letter under House of Representatives > Member Offices Tree diagram.

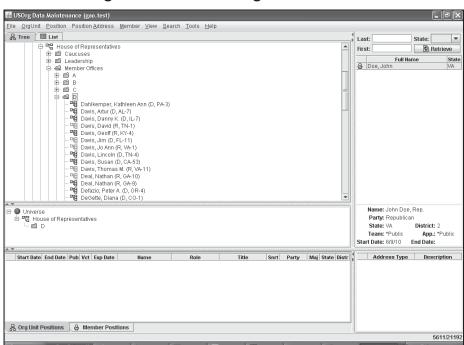


Figure 6-46 Creating Member Office

2. Right-click on the folder and select "Add Child."

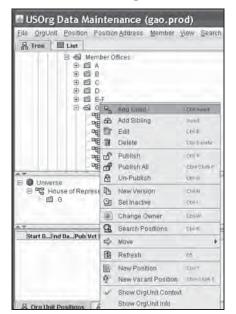


Figure 6-47 Adding Member Office

3. In a new Internet Explorer window, go to Lookup Table Maintenance (https://impd.gao.gov/ltm/Logon.do) and retrieve a random FedOrgCode number.



Figure 6-48 Retrieving FedOrgCode Number

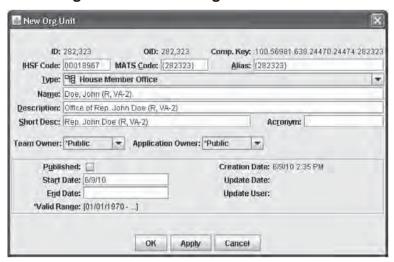
Figure 6-49 Generating FedOrgCode Number



Figure 6-49 By selecting FedOrgCode Generator link, Lookup Table Maintenance randomly creates a number. This number will be used when creating the member office of a new congressional member.

- In the USOrg New Org Unit window, input that FedOrgCode number into the IHSF Code field over the prepopulated number.
- Select in the drop down menu House Member Office (for Senators, the option will be Senate Member Office).
- Under Name, enter member'sinformationin the following form: Last Name, First Name Middle Initial (Letter designating Party Affiliation, and State-District Number).
- Under Description, enter Office of Rep. [First Name Middle Initial and Last Name] (Letter designating Party Affiliation, and State-District Number).

Figure 6-50 Adding Member Office



8. Under Short Desc., enter Rep. [First Name Middle Initial and Last Name] (Letter designating Party Affiliation, and State-District Number).

6.2.2.1.1.2 Creating a Position

- 1. Select the newly created congressional member.
- 2. In the bottom left box (with the line entry having Org Unit under the Name column), select the empty space (blue section in Figure 6-51 below) and scroll to and select New.

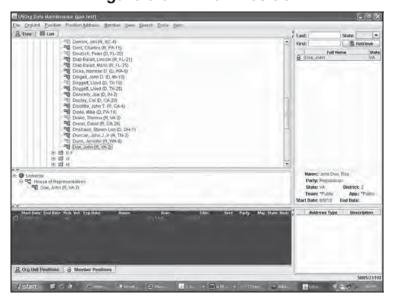
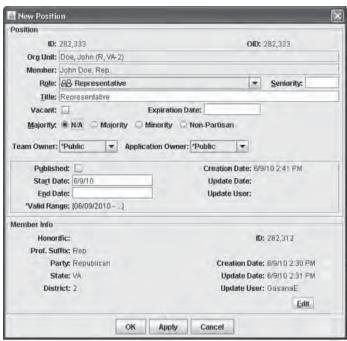


Figure 6-51 New Position

Org Unit and Member fields are already populated.

- 3. For Role, select Representative.
- 4. For Title, select Representative.
- 5. For Majority, select N/A.
- 6. Click Apply, and then OK.
- 7. After the Position has been created, select Address section (blue section in Figure 6-51).
- 8. Click Apply, and then OK.

Figure 6-52 **New Position**



6.2.2.1.1.3 **Creating Position Address**

1. In the blue region in Figure 6-53 on the USOrg main screen, right-click and scroll to and select New.

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"Q Dented, Jim (P, SC-4)

"Q Dented, Jim (P, SC-4)

"Q Dented, Peter (D, PL 20)

"Q Dick Balant, Licetim (F, PL-15)

"Q Dick Balant, Licetim (F, PL-25)

"Q Dicks, Norman D, (D, WA-6)

"Q

Address Region of Maintenance Screen

Figure 6-53

Figure 6-54 Adding New Position Address

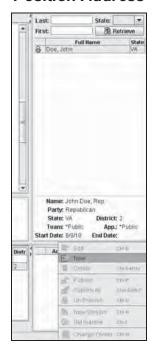


Figure 6-55 New Position



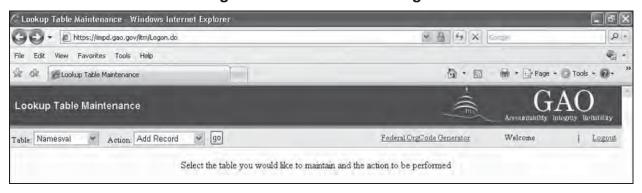
- 2. Enter in Type field, DC Office.
- Fill in Building field: (For House) RHOB / CHOB / LHOB / FHOB; (For Senate) RSOB / DSOB / HSOB / CB.
- 4. Fill in Room, the room of congress member's office.
- 5. Fill in City, Washington; State: D.C.; Zip: Zip of the Building.
- 6. Fill in Phone, and e-mail address of the congress member.
- 7. Check Primary.
- 8. Check Published.
- 9. Select Apply.
- 10. Select OK.

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6.2.2.1.1.4 Creating a Namesval Entry

- 1. In a new Internet Explorer window, go to Lookup Table Maintenance (https://impd.gao.gov/ltm/Logon.do).
- 2. In the drop-down Table menu, select Namesval; and in the drop-down Action menu, select Add Record.
- 3. Click go.

Figure 6-56 Namesval Login



- 4. In the entry record, fill in the prefix (Rep. or Sen.), First Name, and Last Name of the congress person.
- 5. Type in N for GAO_IND.
- 6. Type in Y for Valid.
- 7. Click Save.

Figure 6-57 Namesval Entry

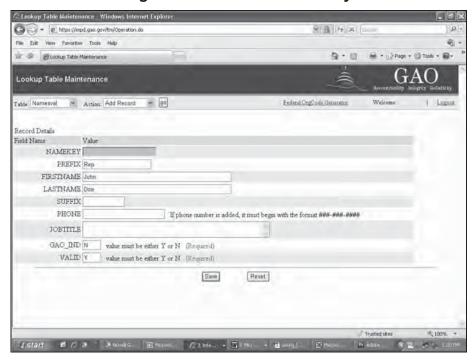
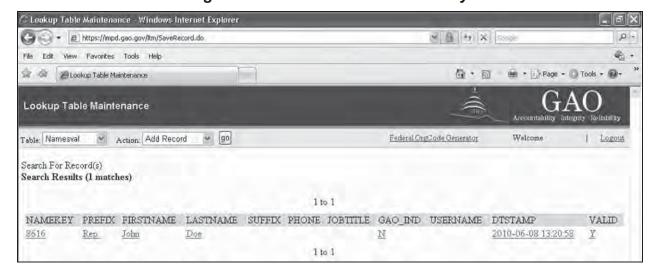


Figure 6-58 Namesval Saved Entry



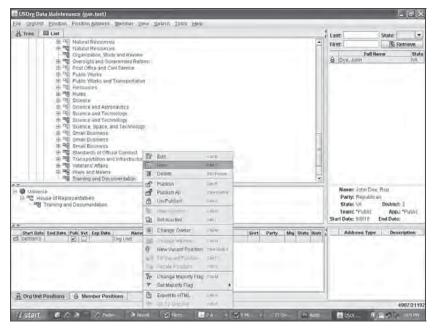
6.2.2.1.1.5 Creating a Mailing List Entry

Add each new member to the appropriate mailings lists, by following the procedures outlined in Section 12.

6.2.2.1.2 How to Add a Committee Member

- 1. Within USOrg, search or add a standing committee. (See section 6.5.2.1.1 for details.)
- 2. Search for the member in the right-hand column.
- 3. Select the Org Unit line entry in the section at the bottom of the window.
- 4. Right-click and select New.

Figure 6-59 New Org Unit

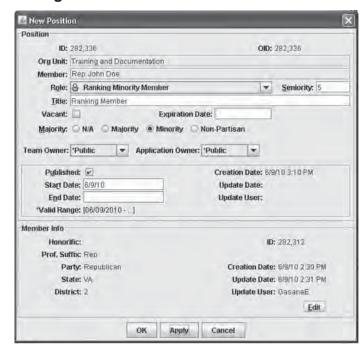


5. Select the appropriate Role field (e.g. Chairman, Ranking Minority Member, and Member).

Note: Use Ranking Minority Member rather than Ranking Member.

- 6. Type in role designation in the title field.
- Select for Majority the status of the congress member's party in the House of Representatives (Majority or Minority).
- 8. Enter number of their ranking (obtained via the order in the Leadership listing of committee members).
- 9. Select Publish.
- 10. Click Apply, and then OK.

Figure 6-60 New Committee Member



6.2.2.1.2.1 Associating Addresses for a Ranking Committee Member

- 1. For Ranking Committee Members (Chairmen and Ranking Minority Members), add addresses.
- 2. In blank section on the bottom right of the USOrg main screen, right-click and select New.
- 3. Fill in all the address information pertaining to that ranking member that was inputted into the member's Member Position Address (see section 6.2.2.1.1.3 for details).

6.2.2.2 Updates

6.2.2.2.1 How to Update the Profile of a Congressional Member

- 1. Search for the member in the upper right hand column.
- 2. Select the name and right-click and select Edit.
- 3. Edit all the necessary fields needing to be updated.

Note: To edit additional information, select Edit to update Party, Prof. Suffix, State and District.

6.2.2.2.2 How to Update Role, Title and Seniority of a Committee Member

- 1. Expand the Tree to get to the committee in guestion.
- 2. Select the committee member in question and adjust fields needing update accordingly.

Note: Any updates in seniority standing in the committee must be followed with updates in all committee members' seniority standing.

6.2.2.2.3 How to Update Address of a Congressional Member

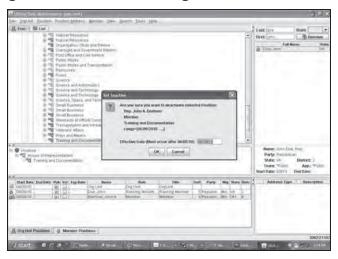
- 1. Search for the member in the upper right hand column.
- Select the corresponding address line entry at the bottom right and right-click (the section directly under where the member's name resides) and select Edit.
- 3. Edit as necessary.

6.2.2.3 Inactivations

6.2.2.3.1 How to Remove Former Congress Members from a Committee via Inactivation Who Have Died, Were Removed, Resigned or Retired

6.2.2.3.1.1 Remove from Committee

Figure 6-61 Inactivating Committee Member



- 1. Expand the Tree to get to the committee in question.
- 2. Once all the members are populated on the bottom section, highlight the committee member in question, right-click and select Set Inactivate.

Note: Do not "Set Inactivate" the name (except only for the deceased) as members can return in the same, similar, or different congressional position.

Note: To see Inactive Status switch to "All Mode." (Go to View on the top menu of the USOrg application, and select Application Data filter. Under Record Type, select All.) The member's entry will be grayed out.

6.2.2.3.1.2 Adjust Committee Ranking

After inactivating the committee member, adjust the ranking of the rest of the committee members based on Leadership data.

Figure 6-62 Committee Ranking

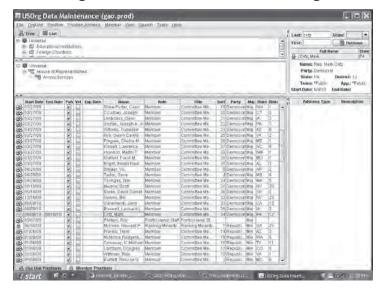


Figure 6-62 shows the Inactive Status of Former Congress Member (note the colorless icon on the far left column. The list also shows the ranking of all the other committee members

Figure 6-63 Editing Seniority Ranking



6.2.2.3.1.3 Remove Member Office

Highlight the entry under the respective Member Office folder in the Org Tree (titled with the first initial of the member's last name), right-click and select Set Inactive.

6.2.2.3.1.4 Remove from Mailing Lists

Remove congress member from the appropriate mailing lists (see section 12.2.1).

6.3 Congressional Committee Staff Members

6.3.1 General maintenance process

6.3.1.1.1 Create Excel Data Comparison Report

The Excel Data Comparison Report matches current Leadership congressional data with USOrg data to find any discrepancies between the two. Any such discrepancies usually are due to personnel or agency changes that occur in the federal government. Changes occur all the time. Accounting for these discrepancies, the USOrg Administrator updates USOrg so that its data matches Leadership's data.

1. Login in to Leadership Directory via the Administrator Account.



Figure 6-64 Leadership Login Page

2. Under My Account, select Load Saved Searches.



Figure 6-65 Load Saved Searches

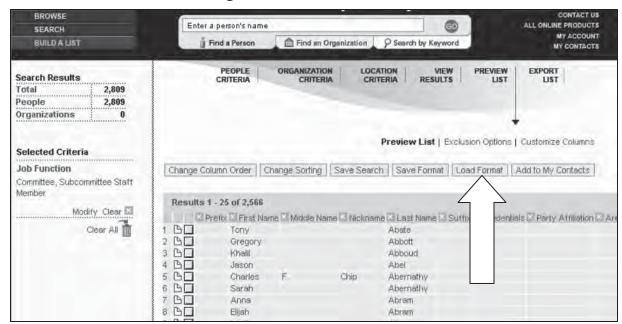
3. Select Congressional Committee Staff Members.

Figure 6-66 Congressional Committee Staff Members



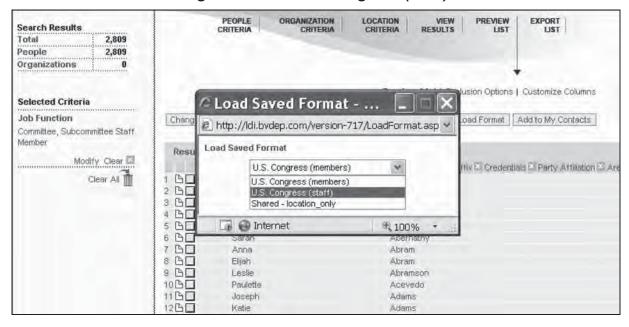
4. Click Load Format.

Figure 6-67 Load Format



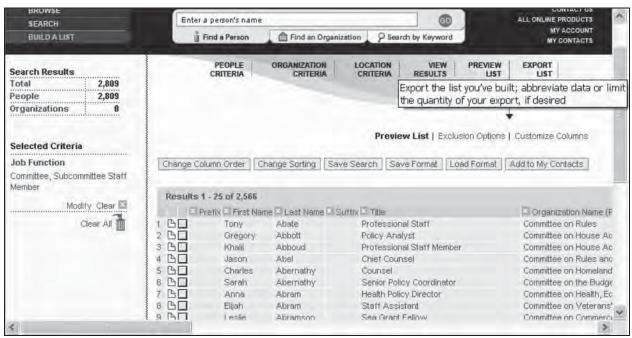
5. Select U.S. Congress (staff).

Figure 6-68 U.S. Congress (staff)



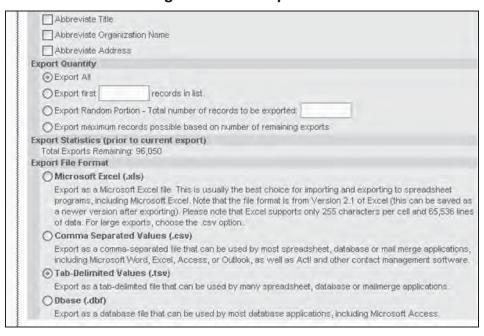
6. Select Export List.

Figure 6-69 Export List



- 7. Under Export Quality, select Export All, and, under Export File Format, Tab-Delimited Values (.tsv).
- 8. Select Export.

Figure 6-70 Export All



9. Under "Remember this Export" in the pop window, Type "U.S. Congress (staff)" in the text field (Figure 6-71).

Figure 6-71 Remember this Export



Figure 6-72 Remember this Export 2



Figure 6-73 Remember this Export 3



- 10. Select top bar, right-click and choose "Download File" (Figure 6-73).
- 11. Re-login to Leadership Directory.

12. Under My Account, scroll and select View Exported Files.

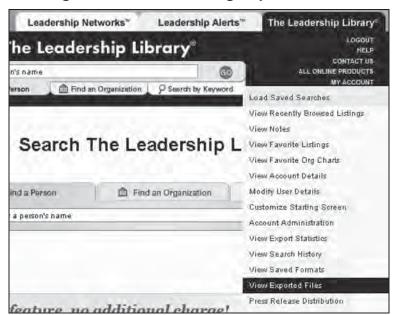


Figure 6-74 Accessing Exported Files



13. Select the U.S. Congress (staff) with the date the file was exported.



Figure 6-75 Retrieving Exported Files

14. Save file in the following format: mm_dd_yyyy.tsv under the current year and month folder (e.g. X:\Local\SRA\INFORMATION MANAGEMENT\Databases\USOrg\Leadership_congressional_information\High Level Staff\).

6.3.1.1.1.1 Create .csv version of the .tsv (exported file)

- 1. Open .tsv file in Microsoft Excel and run Text Import Wizard.
 - a. Select Delimited as file type for data (Figure 6-76).
 - b. Select Tab as the Delimiter (Figure 6-77).

Figure 6-76 Text Import Wizard 1 of 3



Figure 6-77 Text Import Wizard 2 of 3



Figure 6-78 Text Import Wizard 3 of 3



- Check to verify file has 2500 rows.
- 3. Save As a .csv file in mm dd yyyy.csv name format.
- 4. Sort table by Organizational Hierarchy, Last Name, and Title.

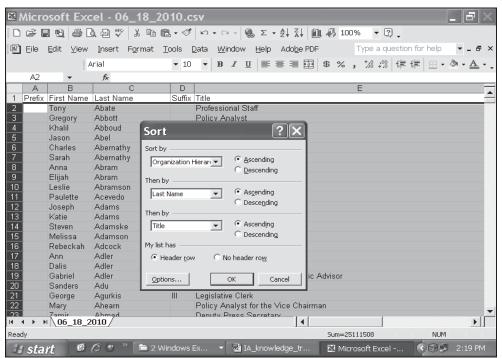
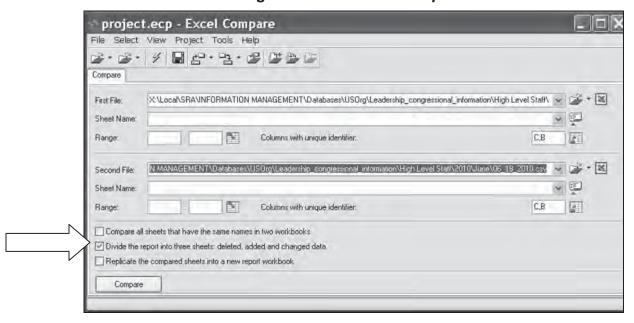


Figure 6-79 Formatting .csv Excel File

6.3.1.1.1.2 Excel Compare

- 1. Launch Excel Compare.
- 2. Fill in the following:
 - a. First file: Date of the last time comparison was run.
 - b. Second file: Current date comparison was run (the file from the previous sub-section).
 - c. Select "Divide the report into three sheets, deleted, added and changed data."

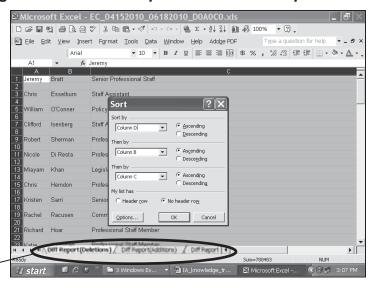
Figure 6-80 Excel Compare



- 3. Select Compare and save results as EC_mm_dd_yyyy_mm_dd_yyyy_unabridged.xls (e.g. EC_04152010_06182010_unabridged.xls).
- 4. Save file as EC_mm_dd_yyyy_mm_dd_yyyy_D0A0C0.xls (e.g. EC_04152010_06182010_D0A0C0.xls).

- 5. Format Excel file for each Deletion, Addition and Changes worksheet.
 - a. Delete the Excel Compare generated columns: Prefix (A), Suffix (E), Committee (G), Washington (K), and DC (L) columns.
 - b. Sort by Columns D (Committee), then B (Last Name), then C (Position).

Figure 6-81 Excel Spreadsheet of Comparison Data



The three separate sheets for deleted, added and changed data can be found in the bottom Worksheet tab bar of Excel. To open a sheet in the window, simply click on it.

- c. Delete all rows above the first populated row.
- d. Select Column size by scrolling to Format > Column > Width.
 - First Name = 10 (width)
 - Last Name = 15
 - Title = 15
 - Alignment: Wrap Text
 - Org. Hierarchy = 25
 - Alignment: Wrap Text (Text Control)
 - Bldg = 15
 - Alignment: Wrap Text
 - Room / Zip / Telephone Number = 10
 - Alignment: Wrap Text
 - Adjust text to Left Justification
- e. Border Table.
- f. Header: EC_ mm_dd_yyyy_mm_dd_yyyy (Cong. Staff Inactivations/Additions/Updates).
- g. Footer: Right Section Page Number.
- h. Scroll to File > Print Area > Set Print Area.
- i. Scroll to File > Page Setup and select Landscape.

- 6. Print File as reference for updating USOrg.
- 7. Before updating USOrg, verify changes in Leadership.

6.3.2 Congressional committee staff member maintenance

- 6.3.2.1 Adds
- 6.3.2.1.1 How to add a staff member for a congressional committee

Figure 6-82 Excel Compare: Additions

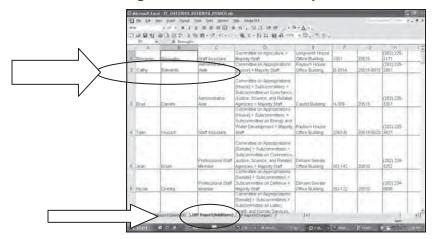


Figure 6-82 shows the Excel worksheet on the additions found in congressional staff members from the Excel Compare Report (covered in section 6.3.1.1.1).

- 1. Verify staff member in Leadership, and check to see if a member profile has already been create by doing the following:
 - a. Go to Leadership Directory and search for the new staff member.

Figure 6-83 Leadership Search

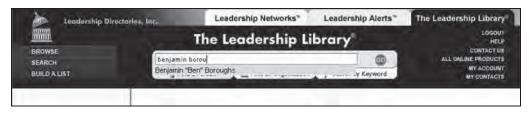


Figure 6-84 Leadership Search Results

- b. In USOrg, type in the name of the member in the fields on top of the Member column on the right to check to see if a member profile on that person has been created.
- 2. Right-click on the Member column and select New.
- 3. Type in member's name in Last and First Name fields (if the name doesn't exist).

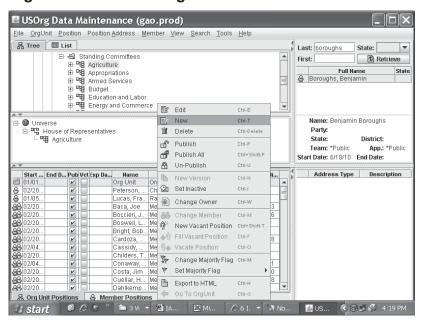
Figure 6-85 New Member Profile for Staff Member



6.3.2.1.2 How to associate staff member to committee (with address)

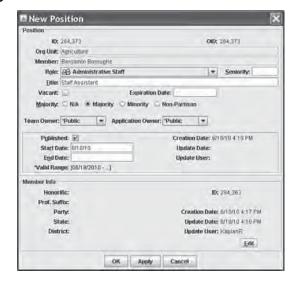
- 1. In Org Tree, pull up the committee with which the member is affiliated under Standing Committees.
- 2. To confirm the committee's actual chamber (for non-unique names of committees), search for the committee in Leadership; the type of members (representatives or senators) and office building indicates what chamber the committee stands under.
- 3. Right-click in the space with the grid table of members and select New.

Figure 6-86 Standing Committee for Staff Members



- 4. In the New Position window, fill in Role, Title and Majority Status (can be found on Excel spreadsheet).
- 5. Select Published.
- 6. Click Apply, then OK.

Figure 6-87 New Position for Staff Member



7. On the main screen for USOrg, right-click in the section at the bottom right and select New to create a position address for the new staff member.

Figure 6-88 Address Region

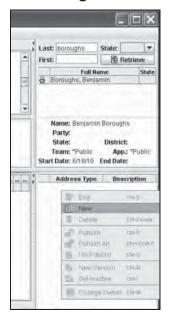


Figure 6-89 Position Address for Staff
Member



- 8. Fill in the following fields: Type, Building, Room, City, State, Zip, Phone, and Email.
- 9. Select Published, and click Apply and then OK

Figure 6-90 Full USOrg Profile for New Congressional Committee Staff Member

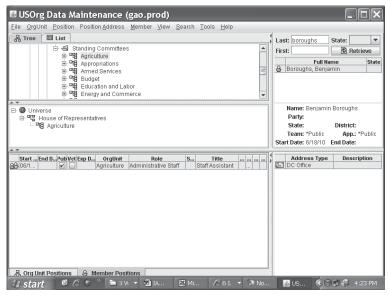


Figure 6-90 shows the full USOrg profile of a new committee staff person. The staff member's member profile, standing committee, and position address have been created.

6.3.2.2 Updates

6.3.2.2.1 How to update the profile of a committee member who changed committees

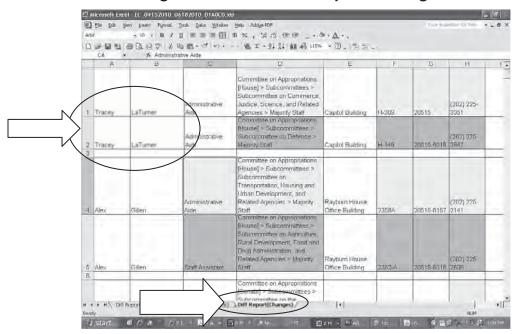


Figure 6-91 Excel Compare: Changes

Figure 6-91 is the Excel worksheet on the changes found in congressional staff from the Excel Compare Report (covered in section 6.3.1.1.1.2).

- 1. Check Leadership and USOrg to confirm changes in staff member's circumstance.
- 2. Go to the old committee in Org Tree, and pull up the staff person's name in the Member column on the right.
- 3. Right-click the committee in the region at the bottom left, and select Set Inactive.

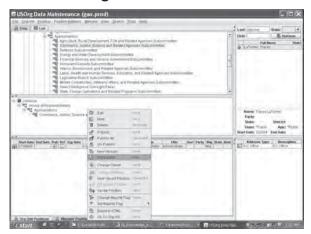


Figure 6-92 Removing Staff Member's Previous Committee

4. Pull up new committee and add the staff person to it and the new position address; see the previous section (section 6.3.2.1.1) for details on how to do so.

6.3.2.2.2 How to update the name of a congressional committee staff member

- Search for the staff members by typing the name in the Member column and clicking the Retrieve button.
- 2. Select the name in the search results.
- Right-click and select Edit.
- 4. Edit the name fields accordingly.

6.3.2.2.3 How to update the role and title of a congressional committee staff member

- Search for the staff members by typing the name in the Member column and clicking the Retrieve button.
- 2. Select the name in the search results.
- 3. Select the Member Positions tab at the bottom of the window.
- 4. Right-click the appropriate committee and select Edit.
- 5. Edit the necessary fields accordingly.

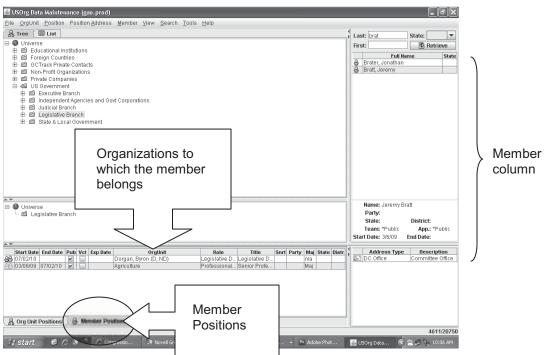


Figure 6-93 Committees Associated with Staff Member

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6.3.2.2.4 How to update the address of a congressional committee staff member

- Search for the staff members by typing the name in the Member column and clicking the Retrieve button.
- Select the name in the search results.
- 3. Select the Member Positions tab at the bottom of the window.
- 4. Select the appropriate committee.
- 5. In the region at the bottom right (under Address Type), select and right-click the DC Office entry and select Edit (see Figure 6-93 above).
- 6. Edit the necessary fields accordingly.

6.3.2.3 Inactivations

6.3.2.3.1 How to remove congressional staff member from committee via inactivation

See procedure steps 3 and 4 of the previous section 6.3.2.2.4 for details.

6.3.2.3.2 How to inactivate a staff member entirely

For committee staff person who no longer work for Congress, remove them from USOrg by searching for the name in the Member column on the right, and highlighting the name, right-clicking, and selecting Set Inactive.

6.4 Non-congressional personnel

Non-congressional members are those federal government personnel who are not affiliated with Congress as a congress member, a congress member's staffer, or as any congressional committee member or committee staff member. These are federal employees who work for any executive department agency, independent agency or regulatory commission.

6.4.1 Adds

6.4.1.1 How to add member

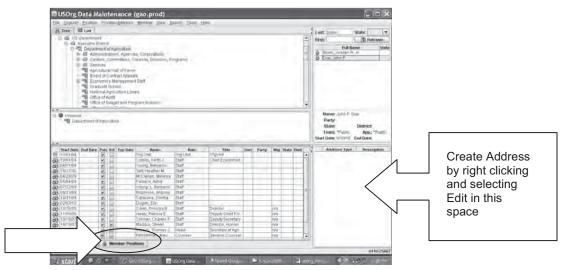
Create member profile by doing the following steps:

- 1. Select Member on the top bar and scroll and select "New."
- 2. Enter First Name, Last Name, Middle Name.
- 3. Select Published.
- 4. Click Edit.
- Select OK.

6.4.1.2 How to associate member to non-congressional organization

1. Select the member's affiliated non-congressional organization in the USOrg tree on the top left.

Figure 6-94 Non-congressional Organization



- 2. Select Org Unit Positions tab at the bottom.
- 3. Select the region with all the associated members of the organization.
- 4. Right-click, and select "New."
- 5. Input the necessary information into the fields as appropriate.
- 6. Right-click in the empty region in the lower right (top bar has Address Type (See Figure 6-94)).
- 7. Input the necessary information into the fields as appropriate.

Figure 6-95 New Position for Non-congressional Member



6.4.2 Updates

6.4.2.1 How to update name of member

- 1. Select the member's profile in the Member column.
- 2. Select the name in search results.
- 3. Right-click, and select Edit.
- 4. Change name fields as necessary.

6.4.2.2 How to update role and title of member

- 1. Select the member's profile in the Member column.
- 2. Select the member's name in the search results.
- 3. Select the Member Positions tab at the bottom of window to pull up all the organizations the member is affiliated with.
- 4. Select the appropriate organization.
- 5. Right-click and select Edit.
- 6. Edit necessary fields as necessary.

6.4.2.3 How to update address of member

- 1. Select the member's profile in the Member column.
- Select the member's name in the search results.
- 3. Select the Member Positions tab at the bottom of window to pull up all the organizations the member is affiliated with.
- Select the appropriate organization.
- 5. To the right, under the Address Type, right-click on the entry DC Office, and select Edit.
- 6. Edit necessary fields as necessary.

6.5 Organizational Maintenance

6.5.1 Executive Branch

6.5.1.1 Adds

6.5.1.1.1 How to add an organization

After receiving the ITSM ticket to add an Executive agency, sub-agency or office, research the
agency via the parent organization's official website, Leadership, and Carroll's federal directory
(GAO Intranet > Research & Collaboration > C > Carroll's Federal Directory) to confirm the new
organization's existence, to find its proper place in the organizational hierarchy, and to verify the
official name.

2. In USOrg, under the List tab, type in parent organization by full name, partial name, or acronym and select Retrieve (to the right).

Figure 6-96 List Tab

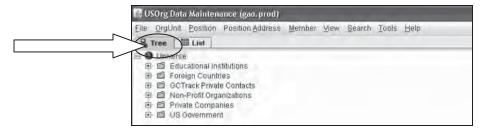


Figure 6-97 Org Search

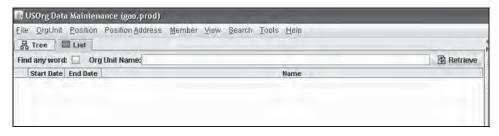
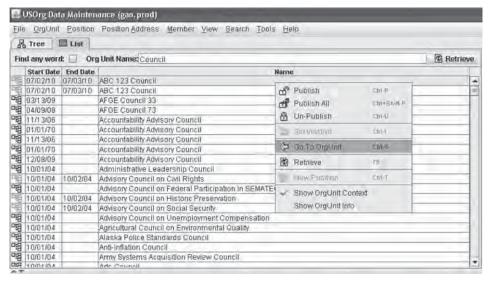
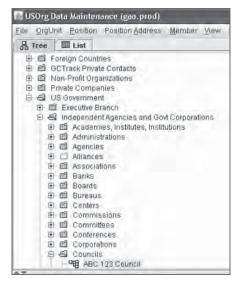


Figure 6-98 Parent Org Search



- 3. Highlight parent organization, right-click, and select "Go To OrgUnit."
 - a. This will move you to the organization in the Tree tab.

Figure 6-99 Tree Unit



4. Under the appropriate sub-agency, highlight folder, right-click, and select "Add Child" to generate a "New Org Unit" window.

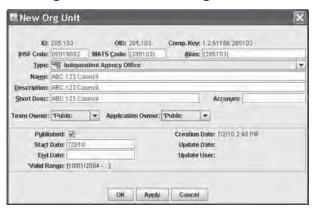
Figure 6-100 Add Child under Parent Org



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- 5. Launch a web browser in another application window, to retrieve a randomly generated org code from Lookup Table Maintenance, and add that 8-digit Federal OrgCode Generator Code to IHSF Code field in the "New Org Unit" window. (See section 6.2.2.1.1.1 for details.)
- For Type, select Executive Sub Office or Independent Agency.
 - Note: Type choice limited to part of tree the agency office is put under.
- 7. Fill in Name, Description, Short Description with same name; shorten name if it cannot fit into the Short Description field.
- 8. Fill in acronyms only for well-known organizations.

Figure 6-101 New Org Window



- 9. Check Published.
- 10. Click "Apply" and then click "OK."
- 11. Create ITSM Assignment off of the parent ITSM ticket for the Oracle Support team no specific assignee to "refresh all materialized views associated with the USOrg database in production environment."

6.5.1.2 Updates

6.5.1.2.1 How to modify the name of an organization

- 1. Select the Org under the Org Unit tree under the Tree tab on the top left hand corner.
- 2. Right-click, and select New Version if agency formally changed its name.

Figure 6-102 New Version of Agency

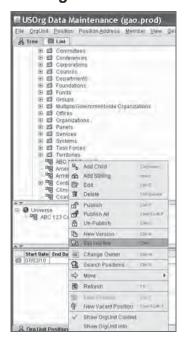


6.5.1.3 Inactivations

6.5.1.3.1 How to inactivate an organization

- 1. Select the org in the Org units tree.
- 2. Right-click and scroll to "Set Inactive."

Figure 6-103 Inactivating Organizations







6.5.2 Legislative branch

6.5.2.1 Adds

6.5.2.1.1 How to add a committee

 On the main screen of the USOrg application, expand the Tree to the Standing Committee folder. (US Government > Legislative Branch > Congress > House of Representatives > Standing Committees).



Figure 6-105 Namesval Saved Entry

- 2. Select and right-click Standing Committees.
- Scroll to and select Add Child.

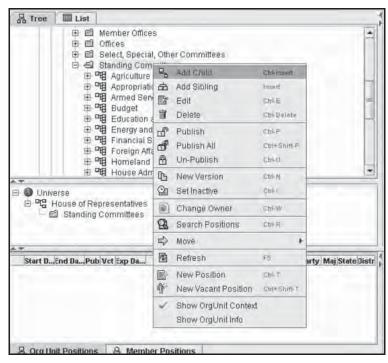
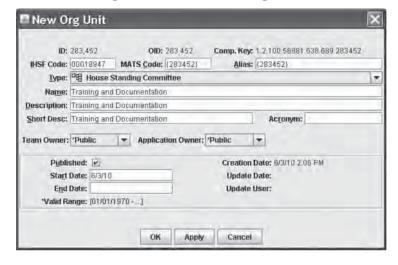


Figure 6-106 Creating Standing Committee

4. In a new Internet Explorer window, go to Lookup Table Maintenance (https://impd.gao.gov/ltm/Logon.do) and retrieve a random FedOrgCode number.





- 5. Input FedOrgCode into the IHSF Code field.
- 6. Type: House Standing Committee.
- Input name of the committee into the Name, Description, and Short Desc fields.
- 8. Click Apply, then click OK.

6.5.2.1.2 How to add a subcommittee

- 1. Go to the Standing Committees folder in the Tree list.
- 2. Select the Parent committee.
- 3. Right-click and select Add Child.
- 4. Repeat procedures 4 8 in the previous section 6.5.2.1.1.

6.5.2.2 Updates

6.5.2.2.1 How to update committee information

- 1. Search for the committee by doing a field search or by using the Org Tree.
 - a. For Field Searches,
 - Enter search query in the Org Unit Name search field.
 - Select the proper committee.
 - Right-click and select "Go To OrgUnit" to have it displayed under the Org Tree tab.

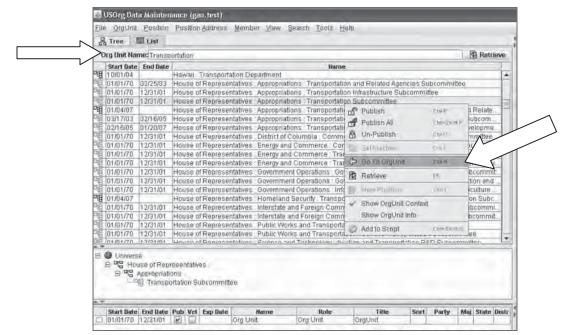
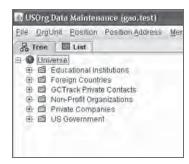


Figure 6-108 Committee Search via Field Search

- b. For Org Tree Searches,
 - Expand the US Government folder > Legislative Branch > Congress and then the proper chamber to locate the committee.

Figure 6-109 Committee Search via Org Tree



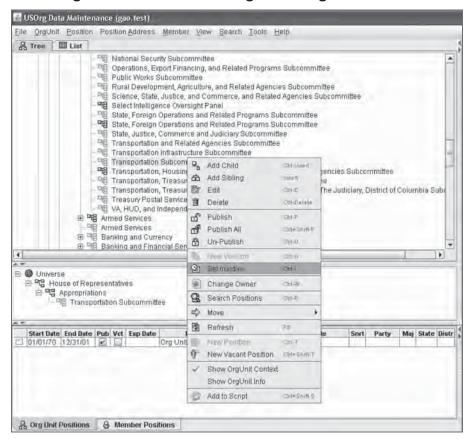
- 2. Select the committee under the Org Tree tab.
- 3. Right-click and select New Version for formal committee name change.
- 4. Edit the appropriate fields as necessary.
- 5. Select Apply then OK.

6.5.2.3 Inactivations

6.5.2.3.1 How to inactivate a committee

- 1. Search for the committee by doing a field search or by using the Org Tree. (See previous subsection 6.5.2.2.1)
- 2. Select the committee under the Org Tree tab.
- 3. Right-click and select "Set Inactive."

Figure 6-110 Inactivating Standing Committee



Section 7 Bibliographic Data Entry (BDE) Process

The Information Management and Product Dissemination (IMPD) contract at GAO stipulates the indexing of GAO products. Product indexers scan and read introductory text in the documents and populate information about the documents in the Publications Database. This database is the primary repository for GAO product metadata in the enterprise. This section is a guide for indexing GAO products. Groups that have documents that require indexing include GAO audit teams, the General Counsel's office, the Inspector General office and Public Affairs.

The Bibliographic Data Entry (BDE) system collects information about the GAO audit and other products in a searchable database that users' can search to find items of interest to them.

7.1 Types of Products

This section includes descriptions of the multiple document types GAO issues. Some of these are quite similar, and the purpose of this section is to clarify the differences between them. There are currently twenty-seven different document types available in the database. Some product descriptions have been pulled from the GAO Electronic Assistance Guide for Leading Engagements (EAGLE).

7.1.1 Audit Products

Note: Format for the Report Number (for non-letter-reports): **(GAO-FY-xxP)** (FY- last two digits of the fiscal year of product; x - digit of the report number; there can be multiple number of "x"es; P - the letter designating products that are not letter reports)

7.1.1.1 Common Products

CG Speeches/Presentations - GAO-01-xxCG

Presentations and speeches given by the Comptroller General.

Correspondence – GAO-01-xxR

"A GAO product generally used to respond quickly to official inquiries or requests for comments. Used for comments on legislative bills or views on government initiatives, issues, or reports." (EAGLE).

Letter Report – GAO-01-xx

"A GAO product that should be no more than 10 pages, formally conveying findings, conclusions, and recommendations for executive action or matters for congressional consideration" (EAGLE).

Audit, evaluation or investigation reports "with a letter portion of generally not more than 10 pages on issues that require less structure than those addressed in chapter reports" (EAGLE).

Other Written Product

"Products, such as questions or analyses for congressional hearings that are not officially transmitted under GAO letterhead or special publications. Also used when none of the product types will result from carrying out an audit, such as a client/entity profile (E), line item summary memo (I), general risk analysis (K), agency summary (O), and cycle memo (Y)" (EAGLE).

Note: This product type contains a variety of products including E-Supplements (supplementary surveys, or additional information to a report of the same topic, that is only available in electronic copy), special GAO publications, etc. Many of the products currently in this category will need to be re-indexed.

Ex: Special Publications - GAO-01-xxSP

Sensitive Letter Reports:

Table 7-1 Sensitive Letter Reports

Туре	Description	Designation
Sensitive but Unclassified	Includes (1) information that by statute or regulations must be safeguarded against disclosure to the public and (2) information that is determined by GAO or other agencies to be potentially detrimental to the good of the government and the public.	GAO-01- xxSU
Classified Reports		GAO-01- xxC
Unclassified Report not to be released on the internet		GAO-01- xxNI

Testimony - GAO-01-xxT

"A formal oral presentation made at the specific request of a committee or subcommittee and the accompanying written statement submitted for the congressional record. Testimony is GAO's most visible product, allowing direct interaction with the Congress" (EAGLE).

7.1.1.2 Other Products

Accomplishment Report - GAO-01-xxA

"The document GAO staff creates to report the benefits and results achieved from the work that GAO performed" (EAGLE).

Note: This document type is one that is **NEVER** selected in BDE. Once an accomplishment report has been approved in ARS, it is exported into Doc_DB, with a document type of "Accomplishment Report," and can be modified in IDBM.

Agency Summaries

"The summary memo prepared for each Chief Financial Officer agency as a result of a consolidated audit. The memo includes data from the agency profile and the general risk analysis. It also addresses specific Chief Financial Officer audit implementation issues, such as actions to address the Brown Bill" (EAGLE).

Audit Reports on Federal Vacancies

Reports to Congress on federal agency compliance with the Federal Vacancies Reform Act of 1998.

Chapter Report

"A GAO report covering broad subject matter of general public interest, complex objectives, and work requiring logical divisions that can only be expressed in a chapter format. Chapter reports should allow a

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reader to follow a clear path from each objective to (1) its related finding in the executive summary and in the chapters and (2) any resulting recommendation for executive action or matter for congressional consideration" (EAGLE).

Note: This product is rarely issued.

Client/Entity Profile

"An entity profile prepared as a result of a consolidated audit. The profile documents the auditor's efforts to obtain an understanding of the entity sufficient to plan and perform the audit in accordance with the applicable auditing standards and requirements. The profile contains such elements as the entity's origins and history, size and location, mission, results of prior and current audits, and accounting and auditing considerations (such as the EDP environment)" (EAGLE).

Comment Letters

Comment Letters from GAO on exposure drafts issued by other auditing standard setting organizations.

Cycle Memo

"The memo prepared as a result of a consolidated audit that addresses cycles – the logical groupings of related transactions and accounting activities (such as billing and accounts receivable)" (EAGLE).

Fact Sheet

"Fact Sheets are official GAO products prepared to support briefings of committees, members or their staff in connection with the results of GAO work or congressional request assignments. They contain facts and limited analyses only- not conclusions, observations or recommendations" (GAO/OIMC 6.1.1 MATS Users' Manual, January 1998).

Note: A Fact Sheet has not been entered into the Publications Database since FY1996. A key characteristic of a fact sheet document is at the end of the report number, there is an FS.

General Risk Analysis

"The risk analysis prepared as a result of a consolidated audit. The analysis contains the overall audit plan. It documents the rationale for all of the key planning decisions, such as the scope and intensity of the audit, the audit approach to be used, the staffing requirements, and the timing of key audit activities" (EAGLE).

Guidance - GAO-01-xxG

"Prescribes, interprets, or explains GAO standards, policies, guidance, procedures, and methods for performing audit, accounting, or evaluation work. Also could include GAO policy and guidance dealing with other government functions and issues" (EAGLE).

Note: Not all guidance product numbers will end in a "G."

Inspector General Report – OIG-01-xx

Non-audit reports conducted by the GAO Inspector General on the GAO internal operations.

Line Item Summary Memo

"A memo prepared for each line item of the Consolidated Financial Statement as a result of a consolidated audit. The memo links the line item approach to the overall audit approach, addresses the level of audit coverage attained for the item, and provides the overall conclusion and the related support for the audit work" (EAGLE).

Management Letter

"Management Letters are official GAO products prepared to communicate nonmaterial internal accounting control weaknesses or noncompliance with laws and regulations which are not discussed separately in the GAO financial statement audit report of a federal agency or other GAO report of that agency.

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Management Letters contain the condition and criteria and discuss the effect or potential effect of the issue identified – not conclusions or recommendations. The letter may, however, include suggestions or observations as to the types of corrective action GAO believes the entity should take" (GAO/OIMC 6.1.1 MATS Users' Manual, January 1998).

Note: A Management Letter has not been added into the Publications Database since FY 1995. Management Letters can be categorized based on their product number. It will contain an ML at the end of the number, for example, AIMD-95-137ML. This product can be viewed in the Publications Database as a reference.

Memorandum

Memorandums were sometimes internal and sometimes external documents.

Note: A unique identifier of a memorandum is at the end of the B-Number (B-123456-O.M.). Not all Memorandums end in O.M.

Press Releases

Informational and news releases from the GAO Public Affairs Office.

Staff Study

"Presents background or factual information from previous GAO work. Does not include GAO opinions, conclusions, and recommendations that have not been previously published" (EAGLE).

Statement for the Record

The written product submitted for the congressional record when a GAO witness does not present oral testimony at the hearing.

Video Presentation

"Communicates the results of an audit work through the use of a visual medium" (EAGLE).

7.1.2 General Counsel Products

7.1.2.1 Decisions

Bid Protest Decisions – B-xxxxxx

"GAO provides a forum for bidders and offerors seeking federal government contracts who believe that contracts have been, or are about to be, awarded in violation of the laws and regulations that govern contracting with the federal government. A bidder or offeror can file a bid protest with GAO, and GAO issues a decision on whether the federal agency has complied with statutes and regulations controlling government procurement." (From: http://www.gao.gov/legal/bidprotest.html, January 14, 2009)

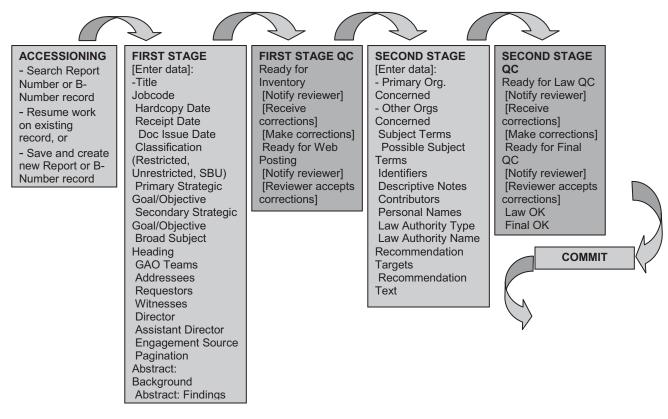
Appropriations Decisions/Opinions – B-xxxxxx

"The Comptroller General renders decisions to certain agency officials on questions involving the use of, and accountability for, public funds, 31 U.S.C. §§ 3526, 3529, and renders decisions to relieve accountable officers for certain losses of public funds, 31 U.S.C. §§ 3527, 3528." (From: http://www.gao.gov/decisions/appro/appro7.htm, January 14, 2009)

Federal Agency Major Rules – GAO-01-xxR / B-xxxxxx

"Pursuant to 5 U.S.C. § 801(a)(2)(A), GAO provides a report to the committees of jurisdiction of both Houses of Congress on major rules proposed by a federal agency (Federal Agency Major Rules) within 15 days of the receipt of a copy of each rule at GAO or publication in the Federal Register, whichever is later. These are called reports on federal agency major rules. GAO also maintains a publicly available database of information on major rules and on non-major rules for which reports have not been written." (From: http://www.gao.gov/legal/congress.html, January 14, 2009)

7.2 General Indexing Procedures



7.2.1 First-Stage Indexing

At this stage, information that will go into the skeletal record that is posted on the web until the full record is available is entered.

Note: To begin indexing, have on hand the product to be indexed, the MATS form, and the Form 115.

7.2.1.1 Logging On

1. Log into the BDE application via the following website: https://impd.gao.gov/ihsf/bde/login.php.

Note: A successful logon will directly send user to the Find/Track tab.



Figure 7-1 BDE Login Screen

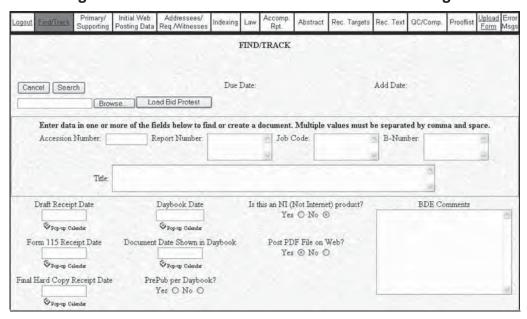


Figure 7-2 BDE Find/Track Tab: Successful Login

7.2.1.2 Accessioning

- 1. To begin indexing, fill in all applicable product identification fields in the Find/Track page up above the line after the title field.
 - a. Report Number: Number assigned to and printed on the PDF copy of the product.
 - i. See section 8.1.1 on naming format.
 - ii. Note: Not all products will have product numbers.
 - b. <u>Job Code</u>: A six-digit number that is assigned to each document and which can be found on the last page of the product, MATS form, Form 115, or via the Product Number Assignment system (https://survey.gao.gov/perm/pbprptno/report.htm).
 - i. Note: Not all documents have job codes. Please see section 8.3 on what to populate in he BDE fields for specific products.
 - c. <u>B-Number</u>: Numbers associated with General Counsel products that begin with a B and are followed by a dash and a series of numbers.
 - d. <u>Title</u>: The name of a product that is found on the front page of the document as large print on the cover page; the text at the top of a product's first page; or the text in a letter's subject line.
- 2. Click the Search button.

Note: For new products the database will not turn up any search results.

- 3. Click the Add/Save button to generate the Accession Number (Accno.).
 - a. Accession Number (Accno): The Publications Database's unique identification number.

Note: The Add/Save button will only save the information above the Title field.

- 4. Fill in all the necessary fields that appear below the Title field based on product title:
 - a. <u>Draft Receipt Date</u>: This field is no longer utilized since products started being delivered electronically. Prior to electronic document delivery, GAO would supply the draft hardcopy of reports to index and then a final version upon completion.

- b. <u>Form 115 Receipt Date</u>: The date product is being indexed if there is a Form 115 (the GAO electronic product dissemination system). Form 115 denotes the product distribution restriction status of the product and who will be receiving the product.
- c. Final PDF Receipt Date: The date product is being indexed.
- d. Daybook Date: The date that the product is released in the GAO Daybook.

Note: By setting this date, index data is pushed to Doc_Db_Lite which is the database which displays the information onto the Public website. (Please refer to section 11 for Daybook procedures.)

- e. <u>Document Date Shown in Daybook</u>: The date the document was issued, not the date the document was posted or released to the public.
- f. PrePub Per Daybook: A Yes or No radio button, which will determine if products should be searchable in the GAO Publications Database based on the Daybook flag being set. It should be set to No. In instances where GAO does not want internal staff to view the database record, Yes would be selected to prevent the document record appearing in the Publications Database prior to public release.
- g. <u>Is this a NI (Not Internet) Product?</u>: A Not Internet product is a product that is only available in paper copy. They are available to the public, but the PDF is not available online. These number designations for such products are GAO-xx-xxNI. Some NI's do not have report numbers that include "NI."
- h. <u>Post PDF File on Web?</u>: A Yes or No Radio button. If a product is an NI product, then the radio button for Post PDF file to Web should be No, so that the PDF can not be posted to the server and will not appear on the website.

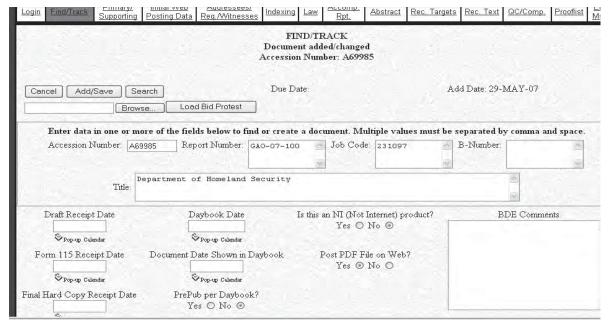


Figure 7-3 BDE Find/Track Tab: Populated Find/Track Page

7.2.1.3 Primary/Supporting

The fields in this tab are only used for documents that are supporting a primary document, e.g., e-supplements, surveys, and videos.

Figure 7-4 BDE Primary/Supporting Tab: Primary Information Screen

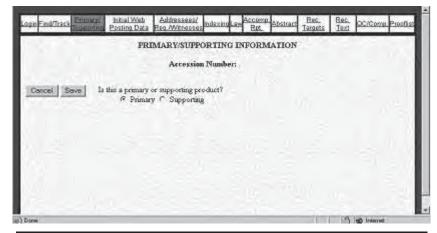


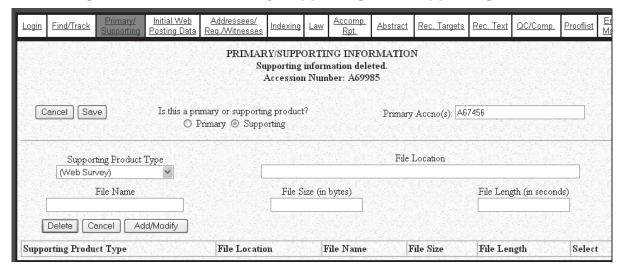
Figure 7-4 shows the "Primary" screen. Defaults for all products are "Primary."

1. To enter the supporting product, select the Supporting radio button.

Note: This will display all the fields for the supporting product (see Figure 7--5).

5. Enter the accession number of the primary product in the Primary Accno Field.

Figure 7-5 BDE Primary/Supporting Tab: Supporting Screen



6. To add the Supporting Product Type, the user must click on the "Add/Modify" button.

Note: After inputting the primary record's Accession Number, certain tabs will grey out; they have been prepopulated with the data from the primary product's index record.

7.2.1.4 Initial Web Posting

- 1. Select the Restriction status.
 - a. If restricted, enter the number # of Days to Possible Release (which can be found on the Form 115).

- b. If a restricted product has been issued at the time it will be released, flag it as Restricted and enter the # of Days of Possible Release; then Select Save.
- Enter the Document Issue Date.
- 3. Select the Document Type, the specific form of the product—correspondence, letter report, testimony. Please see section 8.1 for details.
- 4. Select the Primary Strategic Goal/Objective and the Secondary Strategic Goal/Objective (if applicable) which can be found on the MATS form.
 - a. If a strategic goal did not prepopulate when the Job Code was entered on the main (Find/Track) screen page, manually enter the numbers.

Note: No MATS, no goal.

- Select Search and type number in the search field (Figures 8-7 and 8-8),
- Select the link on the search results screen,

Figure 7-6 BDE Initial Web Posting Data Tab: Goal Search

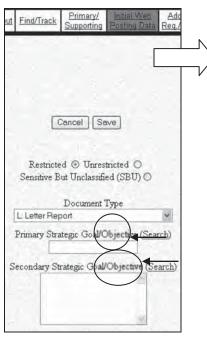


Figure 7-7 Goal Search Field

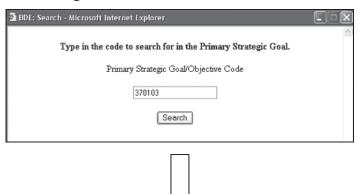
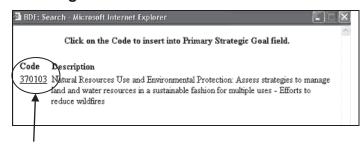


Figure 7-8 Goal Search Results

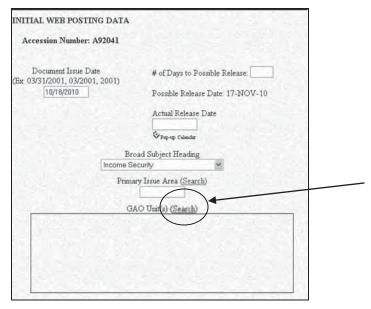


- 5. Select the Broad Subject Heading of the product.
 - a. For Decisions, the Broad Subject Heading will be Decisions and Opinions.
 - b. For Federal Agency Major Rules, the Broad Subject Heading will be Federal Agency Major Rules.
- 6. Select the GAO Unit that issued the report.

Note: This field is prepopulated when the Engagement/Job Code has been entered. For those products (GC products, CG Decisions, Press Releases, etc.) lacking an engagement/job code, manually enter the specific GAO sub-group tasked with overseeing the reportage of the product by doing the following:

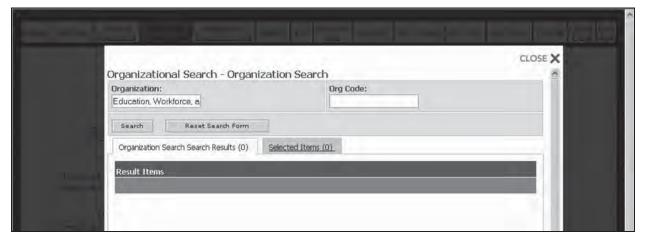
i. Select Search.

Figure 7-9 BDE Initial Web Posting Data Tab: GAO Unit Search



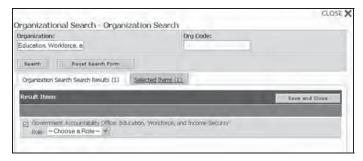
7. Input the name of the unit team which can be found in signatory information on the last page of the body of the product

Figure 7-10 Searching for GAO Unit



a. Select the search result

Figure 7-11 GAO Unit Selected



b. Click on the drop-down menu and select Programming (for the Role)

Figure 7-12 GAO Unit Role

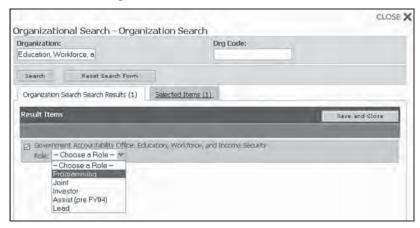
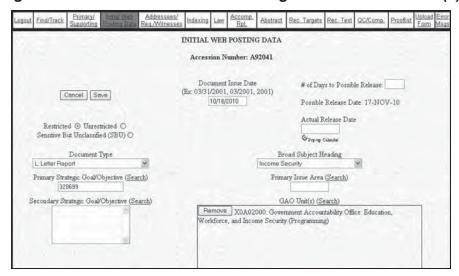
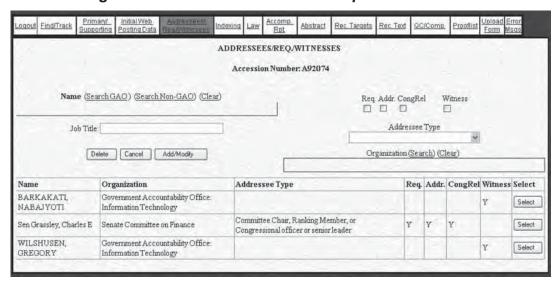


Figure 7-13 BDE Initial Web Posting Data Tab: GAO Unit(s)



7.2.1.5 Addressees/Requesters/Witnesses

Figure 7-14 BDE Addressees/Req./Witnesses Tab



1. Enter the <u>Requestors</u> who are Members of Congress who have requested that GAO conduct an investigation into an issue area, government program, or government initiative. The audit product to be indexed is the result of that investigation.

Usually, requesters are auto-populated in BDE after entering the Job Code during Accessioning; however, if not, manually input them:

- a. Select Search Non-GAO.
- b. Search for and select each requester from only the MATS Form.
 - If there is no MATS form, there are no Reguestors.
 - If the search for a particular congress person does not come up with any results, set "Include Legacy Data" to "Include Legacy" to search for that person.

Figure 7-15 MATS Form: Front

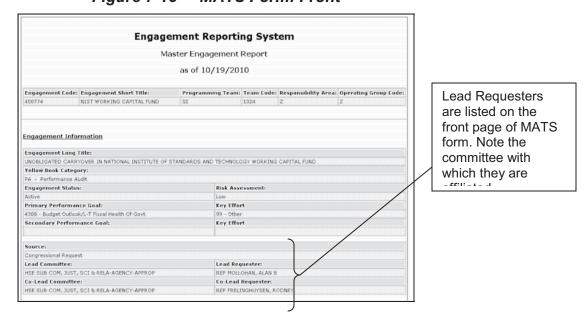
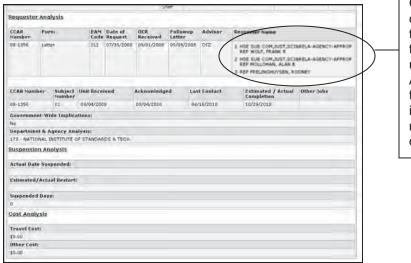


Figure 7-16 MATS Form: Back



Other requesters can be listed on the last page of the MATS form under "Requester Analysis." Usually, this list can include the lead requesters cited on the front page.

- c. Check Req. and CongRel.
- d. In the Organization Search, search for the congressional committee the requester works for.
- e. Click the Add/Modify button.
- 2. Enter Addressees (- Members of Congress to whom the report is addressed) by doing the following:
 - a. Search Non-GAO for and select each member listed atop the first or last page of product.

Figure 7-17 Header of a Letter Report



Figure 7-18 Header of a Letter Report: Magnified

October 20, 2010

The Honorable Alan B. Mollohan
Chairman
The Honorable Frank R. Wolf
Ranking Member
Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
House of Representatives

- b. Check Addr. and CongRel. in the top right.
- c. In the Addressee Type drop down menu, select on of the following:
 - Type 2 "Chairman or Ranking member, senior leader, chairman emeritus" if listed with a title and a congressional committee.
 - Type 3: "Individual Member" If in the header of congressional letter, the person is listed without committee affiliation.

Note: If person is listed as a requestor but not an addressee, that person will not have an addressee type.

- d. In the Organization Search, search for the congressional committee the requester works for that is listed below the addressees name in the letter's header. (See Figure 7--19.)
- e. If congressional member is listed as a requestor on the MATS form without an organizational affiliation, and is also listed as an addressee with an organizational affiliation, create two entries for the same person, one for the affiliation, and one for the individual member status.

Note: Often some addresses listed in the report are also the report's requesters. To reflect this, Check all three boxes in the top right: Req., Addr., CongRel.

- 3. Enter Witness (- GAO staffer(s) who is in charge of the investigation, audit or decision around which the product is centered) by doing the following:
 - Select Search GAO.
 - b. Search for and select the signatory found on the last page of the body of the document (before any attachment, enclosure, or appendix).

Note: There can be more than one.

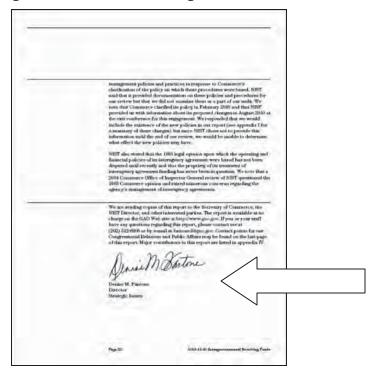


Figure 7-19 Witness Signature in PDF

- c. Check Witness.
- d. Select the Search link next to Organization, and search for the GAO unit with which the witness is affiliated. This can be found below the signature.

7.2.1.6 Indexing

1. <u>Directors</u>: Enter the Director and Assistant Director (GAO staffers in charge of conducting the investigation and creation of GAO audit product) from the MATS form.

Note: If there is no MATS, select the director from the signature at the bottom of the body, and the assistant director from the contributors/acknowledgements section if listed.

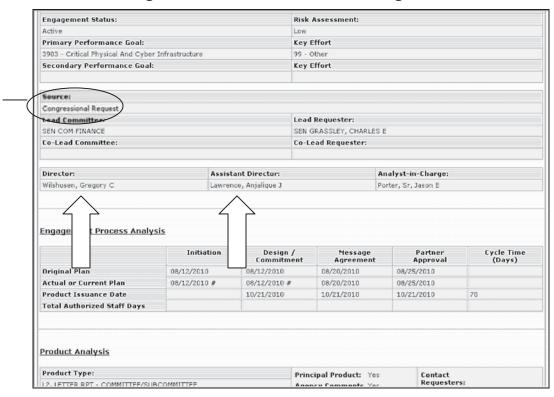


Figure 7-20 MATS Form: Indexing Items

2. <u>Engagement Source</u>: Select the Engagement Source that can be found on the MATS form (see above figure) from the drop down menu in BDE (see the below figure).

Note: Engagement Source is the reason why the engagement/investigation was started.

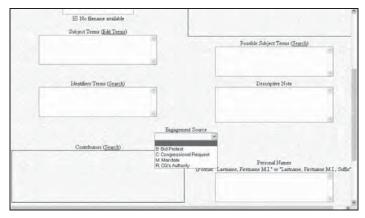


Figure 7-21 BDE Indexing Tab: Engagement Sources

- 3. <u>Pagination</u>: Enter the figures for pagination as follows from the PDF's Document Properties feature (Click Ctrl + D in Adobe Acrobat): (See Figures below.)
 - a. Total Number of Pages.
 - b. Document Format: 8.5 X 11.
 - c. # of Color Pages.

Engagement

Source

d. Document Size (In Bytes):

Note: Do not use commas in field.

Look at product's pages to determine the following:

e. # of Pages in Body of Document.

Note: "Bibliography" and "Related Products" pages are part of the body.

Enter the number of and the number of pages of addendum (appendices, enclosures, attachments).

Note: Pagination information is needed for printing purposes at the Government Printing Office (GPO)

Note: This information is retrieved from the PDF version of product. Select Ctrl + D to display the Document Properties.

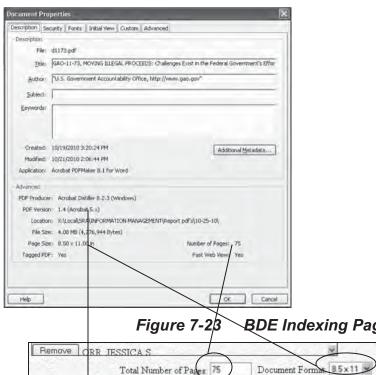


Figure 7-22 **PDF Document Properties**

BDE Indexing Pagination Section

of Color Pages: 0

of Appendices: 5 # of Attachments:

of Enclosures:

of Volumes:

Document Size (In Bytes): 4276944

of Pages in Body of Document: 61 # of Pages in Appendices: 8

of Pages in Attachments:

of Pages in Enclosures:

7.2.1.7 Abstracting

The Abstract provides a summary of the investigation or engagement (known as the Background); the findings of the investigation (the Findings); and a summary of any recommendations GAO makes in the product.

Note: When entering the abstract information, remove references to "I" or "me" or "my"; footnotes and footnote superscripts; and references to figures, charts, tables, graphs, and pictures.

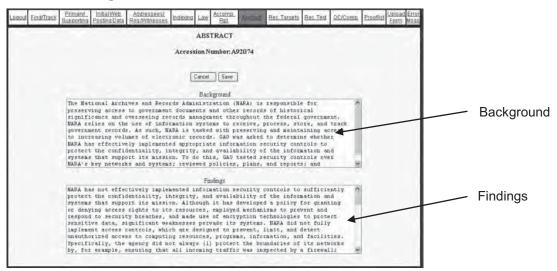


Figure 7-24 BDE Abstract Tab

For the <u>Background</u>, extract the text that answers why GAO performed the audit (purpose, goal, etc.) and provides a brief overview of the subject under investigation (the program, initiative, procedure, etc), and insert it into the Background section of the Abstract tab. (See Figure 7-24 above.)

a. For most letter reports, the Background can be pulled from the Highlights page (page 2 of the product) under the heading of "Why GAO Did This Study." (See Figure 7-25 below.)

Figure 7-25 Highlights Page



Text for Abstract Background section

Recommendation text added to the end of the Findings section Text for Abstract Findings section

United States Government Accountability Office

b. For products that do not have a Highlights page, such as correspondences and some testimonies, extract the text from the product (usually at the beginning) that answers the why of the GAO engagement/investigation (purpose, goal, etc.): Why was the work conducted? What are the objectives of the audit? What is the background of the subject (the program, initiative, procedure, etc.)? (See 7-26 below).

States Government Accountability Office gton, DC 20548 May 19, 2011 The Honorable Darrell Issa Committee on Oversight and Government Reform House of Representatives The Honorable Cliff Steams Chairman Subcommittee on Oversight and Investigations Committee on Energy and Commerce House of Representatives The Honorable Joe Barton House of Representatives The Honorable Michael C. Burgess House of Representatives The Honorable Doug Lamborn House of Representatives Subject: Public Radio and the Role of Federal Funding This report documents information that we presented to your offices on March 31, 2011, in response to your request that we examine the extent to which federal funding is used to support public radio. The Corporation for Public Broadcasting (CPB) was established pursuant to the Public Broadcasting Act of 1967 and receives federal payments through the annual appropriations process. CPB distributes the federal payments it receives in accordance with a statutory formula. Under this formula, the majority of each annual federal payment must be distributed to public broadcasting television and radio stations and program producers, such as National Public Radio (NPR), typically in the form of grants. The attached briefing slides address the following questions: (1) What are the missions of CPB, NPR, and local public radio stations? (2) What are the process through which CPB receives federal payments and disburses them to grantees? and (3) What are NPR's sources of revenue, both federal and nonfederal? STEER C. SHOWER. GAO-11-8608 Public Radio and the Role of Federal Fund

Figure 7-26 Background Information from the PDF

Extract Background material that gives an <u>overview</u> of the subject under GAO investigation and the <u>objectives</u> of the investigation.
Usually, the objectives are numbered.

Note: For most other products, only the Abstract Background field is populated; and the information for it is usually the text in the product's first paragraph.

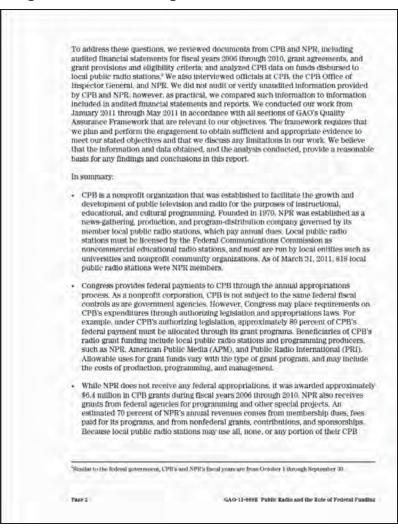
- 2. For the **Findings**, extract text from the product that summarizes the findings or results of the investigation, and insert it into the Findings section of the Abstract tab. (See Figure 7-24.)
 - a. For letter reports, this can be found under the heading of "What GAO Found" on the Highlights page. (See Figure 7-25.)

b. For products that do not have a Highlights page, extract the text from the product that answers the what of the GAO engagement/investigation (what the report shows, finds, discusses).

Keywords to look for as headers: Summary, Findings, Found, and Results in Brief. (See Figure 7-27 below.)

Note: Summary information may need to be pulled from the body text based on each of the objectives of the GAO audit/investigation.

Figure 7-27 Findings Information from the PDF



Extract Findings material from the text that summarizes the findings of the GAO investigation. It is usually found under the headings "Summary," or "Results in Brief."

For the Recommendation Information, extract information from the product that summarizes any new recommendations that are given; and insert it after the findings information in the Abstract's Findings field.

Note: If there is no statement in the introductory section (front pages of letter, or Highlights page) alluding to new recommendations, insert "This report contains recommendations." note in the Abstract's Findings field.

- a. For letter reports, this can be found under the heading of "What GAO Recommends" in the Highlights page. (See Figure 7-25.)
- For products lacking a Highlights page, extract the text from the product that mentions the recommendations; usually this is found toward the end of the product just above the Agency Comments and Signature sections. (See Figure 7-28 below.)

If the text is not in a summary format, extract all the recommendation text for the Abstract.

 Four of seven QIOs record their labor costs under the quality of care review cost code for activities associated with the helpline, such as when following up with beneficiaries who express their concerns orally through the QIO's helpline. As a result, labor costs recorded under the quality of care review cost code for these four could be higher when compared to the other three QIOs that record their labor costs for activities associated with the helpline under the helpline cost code. Conclusions To set the QIOs' budgets for quality of care reviews, CMS depends on historical volume and cost information the agency obtains from the QIOs. However, because CMS does not provide clear instructions for how the QIOs should record their volume and cost information in CMS's information systems, CMS does not obtain consistent information across the QIOs it oversees. Without consistent information on the volume and costs for quality of care review CMS cannot ensure that the budget for these reviews that it establishes for each QIO is appropriate. By providing clear, specific instructions for how the QIOs should record information in CRIS and FIVS, CMS could improve the information it obtains from the QIOs. to establish budgets for quality of care reviews. Recommendation for Executive Action Recommendation To ensure that QIOs consistently record volume and cost information for their quality of care information reviews and to help ensure that the budgets CMS establishes for these reviews are appropriate, the Administrator of CMS should develop clear instructions specifying how QIOs should record information about the volume and costs of their quality of care reviews in CRIS and FIVS Agency and QIO Comments The Department of Health and Human Services provided us with written comments on a draft of this report. The department's comments are reprinted in enclosure IV. IHIS agreed with our recommendation and offered additional comments from CMS. In its comments, CMS indicated that the agency is taking steps to improve the collection of volume and cost information from QIOs. CMS said it would provide explicit and clear guidance to QIOs about how to record this information prior to the start of the 10th Statement of Work. HHS also provided technical comments that we incorporated as appropriate We also provided the seven QIOs we interviewed the opportunity to verify statements they made that were used to support our findings and incorporated their comments as appropriate. As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the report date. At that time, we will send copies to the Secretary of Health and Human Services, the Administrator of the Centers for Medicare & Medicaid Services, and other interested parties. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov. GAO-11-116R Medicare Quality of Care Reviews

Figure 7-28 Recommendation Information from the PDF

7.2.1.8 Quality Checking/Completions (QC/Comp.)

- 1. After first-stage indexing is complete, push the "Ready for Inventory Update" and "Ready for Web Posting" buttons.
 - a. Once the "Update Distribution Inventory" button has been pushed, do not push the Initial Web Posting Okay button until you have approval from Public Affairs to list documents on the public website.

Note: For restricted products, the "Initial Web Posting Okay" button on the right won't appear.

UNCLASSIFIED/FOR OFFICIAL USE ONLY

2. Notify the IM Quality Check (QC) Administrator that the record is ready for first-stage QC.

First-Stage Quality Checking

- The IM QC Administrator checks the entered information for accuracy and makes any necessary corrections.
- 2. The IM QC Administrator pushes the "Update Distribution Inventory" and the "Initial Web Posting Okay" buttons.

Note: The "Initial Web Posting Okay" pushes data to DBLite.

3. The IM QC Administrator notifies the Indexer that the record is ready for completion so that the Indexer can proceed with entering second-stage information in the product's index record.

Addressees/ Reg./Witnesse Initial Web Find/Track Abstract Rec. Targets Rec. Text OC/COMPLETIONS Accession Number: A92121 Ready for Inventory Update Update Distribution Inventory Ready for Web Posting Initial Web Posting Okay Ready for Law QC Ready for Final QC Accession Document Report # Title QC Type Date/Time Sender Date GAO-10-Moving Illegal Proceeds: Challenges Exist in the Federal Government's 26-OCT-Distribution 24-SEP-10 A92121 gasanae 983SU Effort to Stem Cross-Border Currency Smuggling 10 Inventory

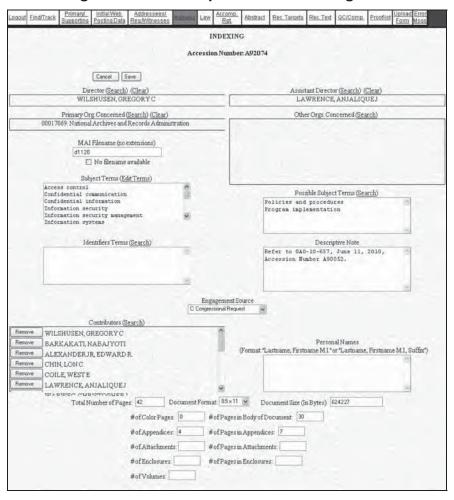
Figure 7-29 BDE QC/Comp. Tab: First-Stage QC/Comp. Buttons

7.2.2 Second-Stage Indexing

At this stage, all product information will go into index record to complete it.

7.2.2.1 Indexing

Figure 7-30 Complete BDE Indexing Tab



7.2.2.1.1 Organizations

 Primary Org. Concerned: Select the primary federal government agency (or non-federal state agency, or private company) that is central to the report under the "Primary Org. Concerned" header.

Note: Refer to the Highlight Page for details.

2. <u>Other Orgs. Concerned</u>: Select any secondary or addition organizations under the "Other Orgs. Concerned" header.

Note: This must include the broad parent agency to which the report recommendations are targeted.

7.2.2.1.2 Terms – keywords used to identify and categorize a report.

To generate keywords that identify the product (for easy searching in the Publications Database and the GAO public website), use the MAI tool.

<u>Machine-Added Indexer (MAI)</u> is a tool used to scan letter reports, testimonies, and correspondences to supply indexers with a suggested list of subject terms that concern the topic of that product.

Note: Not all of the words may apply to the report. Use the generated list as a guide.

1. To use the MAI tool, select the Upload Form tab in the top right.

Figure 7-31 Complete Indexing Tab



2. Browse for the product's PDF, and select Upload File.

Figure 7-32 MAI: Browsing for PDF

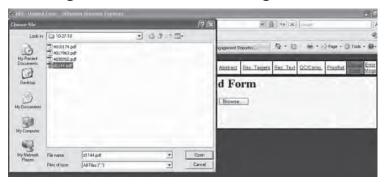


Figure 7-33 MAI: Uploading PDF (1 of 2)

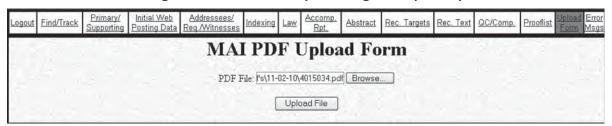


Figure 7-34 MAI: Uploading PDF (2 of 2)



3. Switch back to the Indexing tab and input the file name of the PDF (without the .pdf extension) into the field under the "MAI Filename (no extensions)" header.

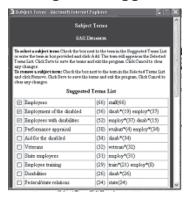
Law Accomp. Abstract Rec. Targets Rec. Text QC/Comp. Prooflist Form Find/Track Primary/ Initial Web Supporting Posting Data INDEXING Accession Number: A92142 Cancel Save Director (Search) (Clear) STEINHARDT, BERNICE Assistant Director (Search) (Clear)
DOHERTY, WILLIAM J Primary Org. Concerned (Search) (Clear) utive Office of the President Office of Management and Budget Other Orgs. Concerned (Search) MAI File d1144 Subject Terms (Edit Terms) Agency missions Possible Subject Terms (Search) Customer service Data collection Customer satisfaction

Figure 7-35 Inputting File in MAI Upload Field

- 4. Input words into the following fields:
 - a. <u>Subject Terms</u> listing of terms from the GAO Thesaurus that are topics and descriptors
 of the content of the report.
 - i. To input terms suggested by MAI, select Edit Terms to the right of the Subject Terms header on the Indexing page.

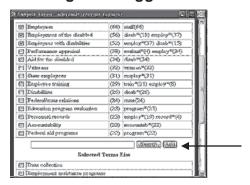
Check any applicable terms from the list. (Note: Not all suggested terms will apply to the product.)

Figure 7-36 Adding MAI-Suggested Terms (1 of 2)



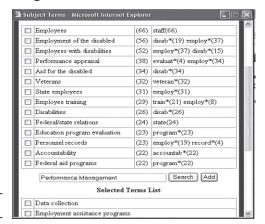
Then click Add at the bottom of the list.

Figure 7-37 Adding MAI-Suggested Terms (2 of 2)



 To input terms not suggested by MAI, type query into the search field, and click Search.

Figure 7-38 Search for Term



All the terms added are itemized below the list of MAIsuggested terms and the search field.

Note: For words already available in the database, simply type them into the field and click Add.

If the search yields a result, select the check box to the left of the term and click Add.

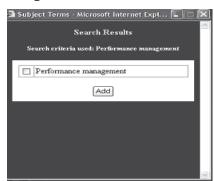
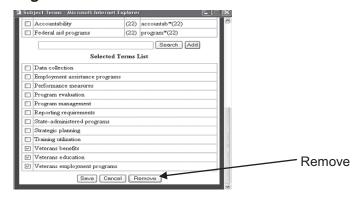


Figure 7-39 Add Term

Conversely, to eliminate a word from the list, Check the term and select Remove at the bottom.

Figure 7-40 Remove Term



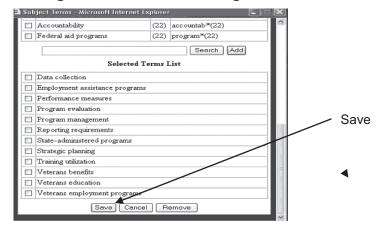
If the search yields no results, the following window will appear:

Figure 7-41 Term Search Results Error



iii. Save list by click Save at the bottom.

Figure 7-42 Save Changes



b. **Possible Subject Terms** – Database add-on that is used to flesh out specific terms.

Note: This field was originally created to provide the Taxonomer with lists of terms that could stand to be added into the GAO Thesaurus.

- iv. To input, search for the term.
- 5. **Identifiers** Places, things or programs that are prominently in the document.

Below are types and examples of identifiers:

Table 7-2 Examples of Identifiers

Types of Identifier	Exam	ples of Identifiers		
	HHS Child Care ar	nd Development Fund		
Programs	DOD Advanced Su	ıbmarine Technology Program		
	Medicare Program			
	Advanced Medium	Range Air-to-Air Missile		
Weapons	AGM-65G Missile	AGM-65G Missile		
	M42 Self-Propelled Gun			
Aircraft	F-14 Aircraft	Tomcat Aircraft		
Aircrait	A-10 Aircraft	Thunderbolt Aircraft		
Discourse	HIV			
Diseases	Acquired Immune Deficiency Syndrome			
	Denver, CO			
Places	Washington, DC			
	South China Sea			

7.2.2.1.3 Descriptive Notes

Cite all GAO reports footnoted throughout the body of the report into the Descriptive Notes field.

Search for each report's Accession Number via DocDB.

Note: If the product lists a report with only a month and a year, use the Document Date in the Indexing tab of product's index record to get specific the date of issuance.

Note: For older reports such as GAO/AIMD-00-21.3.1, enter it without the GAO: AIMD-00-21.3.1.

Input reports in the same format as the following example: "Refer to GAO-10-327, January 26, 2010, Accession Number A88863, GAO-08-345, January 26, 2008, Accession Number A80330; and GAO-05-898, September 8, 2005, Accession Number A36037."

7.2.2.1.4 Contributors

In the Contributors field, list the GAO staffers who have contributed to the creation and production of a GAO product. The section will be clearly labeled in the document or at the end of the body of the document, there will be the following sentence: "Key contributors to this report were."

7.2.2.2 Laws

- 1. Cite all laws referenced in the text by searching for the law in the search field, and select result. If there are no results, type the law into field.
 - Any law with an apostrophe will be read as a questions mark (?) in BDE; remove it and add an apostrophe.

- For pending or proposed laws (Acts not House or Senate Resolutions) that have names, enter them.
- When a law is cited more than three times, list it also as an Identifier.
- Types of Laws Cited: (Enter laws in the format as the below examples.)

Table 7-3 Examples of Laws

Law	Example
Law Name (State and Federal Acts)	Sarbanes-Oxley Act of 2002
Public Laws	P.L. 115-5
Statute-at-Large	123 Stat. 115
Code of Federal Regulations	7 C.F.R. 1215
United States Codes	12 U.S.C. 5; 3 U.S.C. App. 15
Federal Acquisition Regulation	F.A.R. 12.101
Executive Order	Executive Order 13214
OMB Circular	OMB Circular A-11
OMB Memorandum	OMB Memorandum M-09-29
Comptroller General Decision	71 Comp. Gen. 155
Court Cases	Pacific National Co. v. Welch, 304 U.S. 191
Bid Decisions	B-400436 (2008)
Proposed Acts	Continuing Appropriations Act, 2011

2. For Type, select the specific number corresponding to the law:

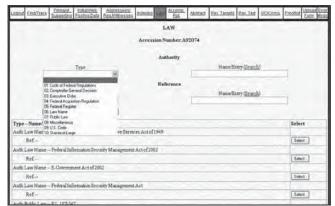
Table 7-4 BDE Codes for Laws

01: Code of Federal Regulations
02: Comptroller General Decision
03: Executive Order
04: Federal Acquisition Regulation
05: Federal Register
06: Law Name (State and Federal Acts)
07; Public Laws
08: Miscellaneous*
09: United States Codes
10: Statute-at-Large
* N . C . C . C . C

* **Note**: For court cases, OMB circulars and memoranda, and bid decisions select "08: Miscellaneous."

3. Select Add/Modify.

Figure 7-43 Law Tab



7.2.2.3 Recommendations/Matters for Congressional Consideration

The GAO recommended actions for executive agencies and congress based on the audit investigation of a specific report. They may be separated by a heading in the product of by reading the document. For example, "We recommend that the Secretary of Defense . . ."

- 1. Go to the Rec. Targets tab to enter the recommendations.
- 2. Select the Search link and type in the name of the government agencies/Congress (the Recommendation Targets).

Note: If the Recommendation Target is different from the Primary Organization Concerned entered in the Indexing tab, select it as an "Other Organization Concerned" (to the right of the Primary Organization Concerned field in the Indexing Tab).

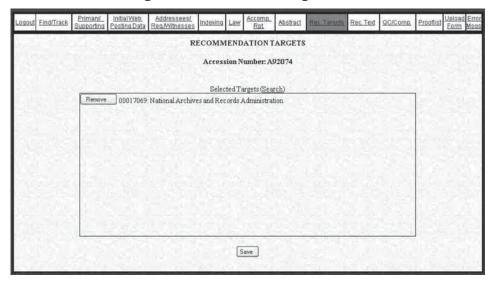


Figure 7-44 Rec. Targets Tab

3. To enter the text of the recommendation, go to the Rec. Text tab, the next tab to the right.

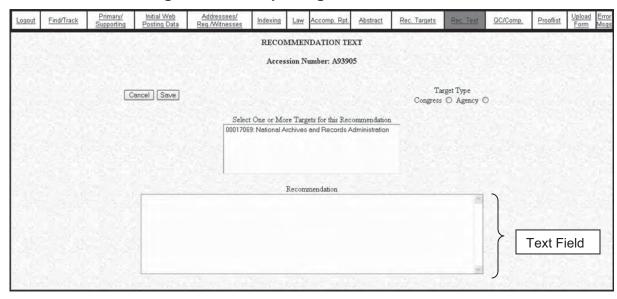


Figure 7-45 Inputting Recommendations

c. Add each recommendation in the below format:

Example Document Text:

We recommend that the Chairman of USITC

- revise the policies and procedures for all offices and programs to recognize the authorities and responsibilities of the IG under the IG Act, including procedures for recognizing the IG's authority for access to USITC documents, records, and information;
- revise the formal written orientation information provided to the Commissioners to include sections on
 - o the overall authorities and responsibilities of the IG:
 - the IG's authority and the USITC policies for IG access to USITC documents, records, and information; and
 - o the responsibilities of the Chairman to maintain an appointed IG.

The format to enter text into BDE: (Remove paragraph marks, extraneous characters, and "we recommend that" references.)

(Three separate entries for each bullet. The bullet items are enumerated.)

The Chairman of USITC should revise the policies and procedures for all offices and programs to recognize the authorities and responsibilities of the IG under the IG Act, including procedures for recognizing the IG's authority for access to USITC documents, records, and information.

The Chairman of USITC should revise the formal written orientation information provided to the Commissioners to include sections on (1) the overall authorities and responsibilities of the IG; (2) the IG's authority and the USITC policies for IG access to USITC documents, records, and information; and (3) the responsibilities of the Chairman to maintain an appointed IG.

Note: When inputting "Matters for Congressional Consideration," select the target as "Congress" and the Recommendation Text as "Congress may wish to consider. . ." as the subject and action verb of recommendation.

4. To add additional recommendations, select the Rec. Text tab again, and select "Add another recommendation."

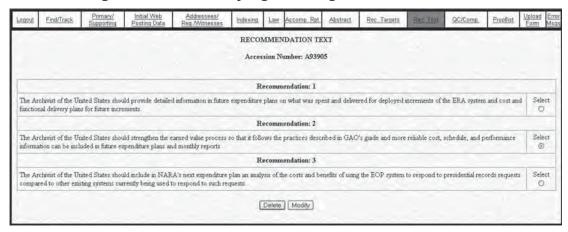
This will display the window with the text field (see Figure 7-42 above).

Figure 7-46 Rec. Text Tab



5. To modify or delete a recommendation, click Rec. Text, and select "Modify/Delete an existing recommendation" (see Figure 7-43 above).

Figure 7-47 Modifying/Deleting Recommendations



- a. To delete, select the appropriate recommendation and click the Delete button at the bottom.
- b. To modify the text, select the appropriate recommendation and click the Modify button. Edit text, add to text, or change the recommendation target as needed.

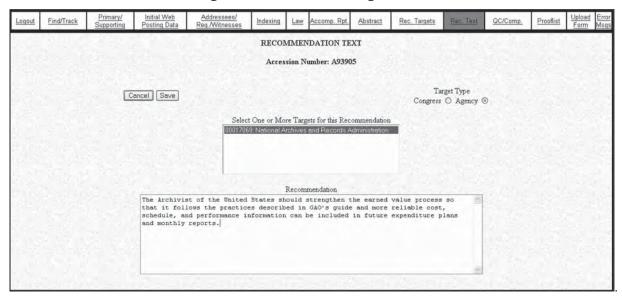


Figure 7-48 Rec. Targets Tab

7.2.2.4 QC/Comp.

- 1. Once Second Stage is complete, go to the QC/Comp. tab.
- 2. Select the "Ready for Law QC" and the "Ready for Final QC" buttons on the left. (The "Law Okay" and "Completed Final QC Okay" buttons will appear on the bottom right.)



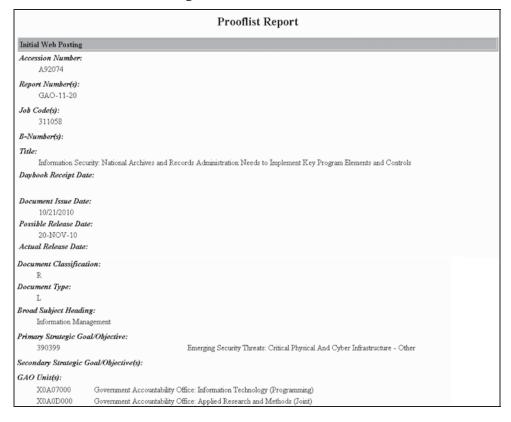
Figure 7-49 Second-Stage QC/Comp. Buttons

7.2.2.5 Prooflist

1. Select the Prooflist Tab and print the page.

Note: This will be a paper copy of the index record that lists out all the fields that have been populated per the aforementioned procedures.

Figure 7-50 Prooflist



Second-Stage Quality Checking

- 2. The IM QC Administrator checks the entered second-stage information (from the Prooflist) for accuracy and sends the Prooflist with corrections on it back to the indexer to update the database.
- Once the corrections have been made to the database record, the QC Administrator will go to the QC/Comp tab and click the "Ready for Web Posting" button again and the "Law Okay" and "Completed – Final QC Okay" buttons on the bottom right.

Note: Pushing the buttons on the bottom right loads the product into the Publications Database. The index record will then be available only in the Interim Database Maintenance (IDBM).

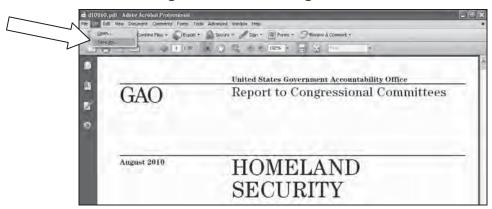
Note: BDE records that have not been finalized and saved are deleted after 60 days.

7.3 Ad Hoc Tasks

7.3.1 Entering SBU GAO Reports into DM/ERMS

- 1. Open the SBU document in Adobe Acrobat.
- 2. In the top left hand menu, select DM > Save As.

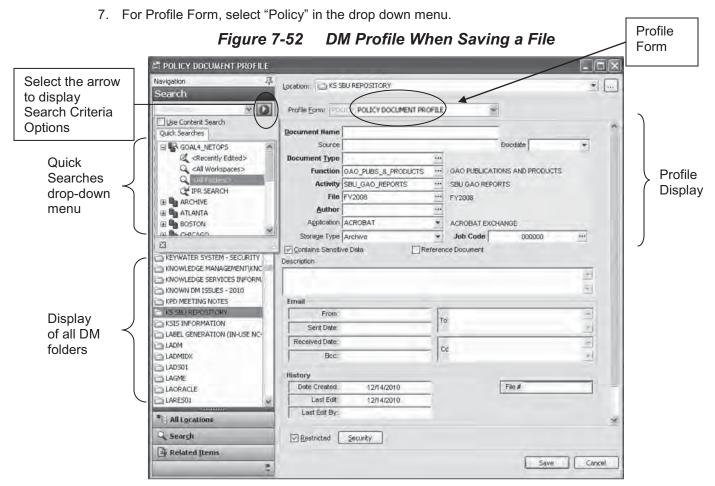
Figure 7-51 Saving a PDF to DM



Searching/Opening the KS SBU Repository folder

- 3. Select the Search button at the bottom left.
- 4. Select the drop-down menu and expand GOAL4_NETOPS > Quick Searches > All Folders.
- 5. To search the folder, click the arrow to the right of the search field.
- 6. Scroll down the list to KS SBU Repository, and select it.

Note: A search also can be done under the folder's DM number: 84459.



- 8. In the Profile Display, input the following information in the respective fields:
 - a. For Document Name, enter just Product Number and Product Name (no punctuation between the two or at the beginning and end).
 - b. For Docdate, enter the Document Issue Date (the date on the PDF).
 - c. For Document Type, select REPORT PUBLISHED GAO REPORTS ONLY.
 - d. For Function, select GAO PUBLICATIONS AND REPORTS.
 - e. For Activity, select SBU GAO REPORTS.
 - For File, select the current fiscal year (e.g. FY2008), regardless of the fiscal year of the product.
 - g. For Author, select HUNNN (Nancy Hunn).
 - h. For Job Code, search for the 6-digit engagement code of the report by selecting the ellipses to the right.

Note: If the job code is not available in DM because the engagement is completed, enter 000000.

- Check box Contains Sensitive Data.
- j. In the Description field, type in "To obtain access to this SBU report, contact Mike Motley, QCI (202-512-8126)."
- k. Click Security and remove ONLY the trustee and access rights to IMPD staff persons.

Note: The person who enters the file into DM may not be able to be remove their access rights.

Click OK and save the document.

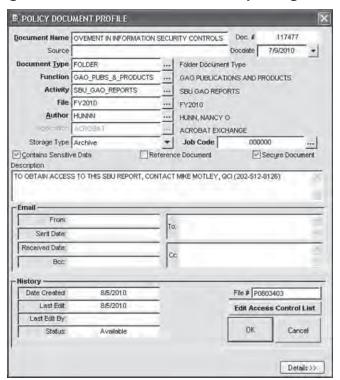


Figure 7-53 DM Profile When Opening a File

9. If notice was sent with a DM version of the product requiring access rights, send an e-mail to the sender requesting read-only access rights be relinquished.

7.3.2 **Weekly MATS Error Report**

The MATS Error Report is a weekly generated report on discrepancies between Doc DB, the database that houses processed index records, and Mission Assignment Tracking System (MATS), the database that tracks the engagement information of issued products from the mission teams.

1. Print out MATS Error Report email.

Figure 7-54 MATS Error Report Email

```
----Original Message----
From: IHSF System Account [mailto:ihsfsys@lnxpro2a.gao.gov]
Sent: Monday, June 28, 2010 10:08 AM
To: InfoMgt; IHSFDEV
Subject: Error Report : MATS weekly refresh
Mon Jun 28 10:07:48 EDT 2010
_______
ACCNO: A88644 RPTNO: GAO-10-325T JOBCODE: 250511
Jobcode 250511 not found in MATS
                                                                                                                   MATS
ACCNO: A89150 RPTNO: GAO-10-464R JOBCODE: 250524
                                                                                                                   lacking Job
Jobcode 250524 not found in MATS
                                                                                                                   Codes for
ACCNO: A89734 RPTNO: GAO-10-736T JOBCODE: 250540
                                                                                                                   specific
Jobcode 250540 not found in MATS
                                                                                                                   products
ACCNO:A89797 RPTNO:GAO-10-706T JOBCODE:120915
Jobcode 120915 not found in MATS
ACCNO: A90096 RPTNO: GAD-10-834T JOBCODE: 311052
Jobcode 311052 not found in MATS
ACCNO: A90086 RPTNO: GAO-10-655R JOBCODE: 320749 Product types in DOC_DB and MATS do not match.
    DOC_DB document type : R , MATS product code : P
                                                                                                                   Discrepancy
                                                                                                                   in Product
ACCNO:A90098 RPTNO:GAO-10-821T JOBCODE:250502 Product types in DOC_DB and MATS do not match.
     DOC_DB document type : T , MATS product code : H
                                                                                                                   MATS
ACCNO:A90146 RPTNO:GAO-10-661R JOBCODE:440835 Product types in DOC_DB and MATS do not match.
     DOC_DB document type : R , MATS product code : L
ACCNO:A89388 RPTNO:GAO-10-431 JOBCODE:320663 Team/role values in DOC_DB and MATS do not match.
     Team/Role in DOC_DB: 1
           TAT/P
                                                                                                                   Discrepancy
     Team/Role in MATS: 2
                                                                                                                   in Team/Role
           DCM/I
           IAT/P
                                                                                                                   between
                                                                                                                   Doc DB and
                                                                                                                   MATS
ACCNO:A89430 RPTNO:GAO-10-650T JOBCODE:440875 Team/role values in DOC DB and MATS do not match.
     Team/Role in DOC_DB: 1
           HSJ/P
     Team/Role in MATS: 2
           ARM/I
           HSJ/P
ACCNO:A88648 RPTNO:GAO-10-251 JOBCODE:361127 Primary strategic goal values in DOC_DB and MAT5 do not match,
                                                                                                                   Discrepancy
DOCDB Strategic Goal : 760406
MATS pris: 4815 awp: 99, Calculated Value: 481599
                                                                                                                   in Strategic
                                                                                                                   Goal
ACCNO:A90228 RPTNO:GAO-10-883T JOBCODE:361202 Primary strategic goal values in DOC_DB and MATS do not match.
DOCDB Strategic Goal :
MATS pris: 3991 awp: 98, Calculated Value: 399198
```

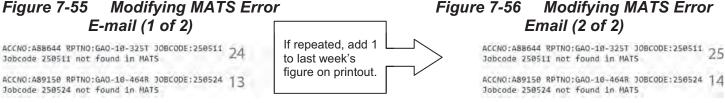
Type between Doc DB and

2. Refer to previous week's report and if an error appears again in the current week's e-mail, add one to last week's figure next to the line on the hard-copy printout.

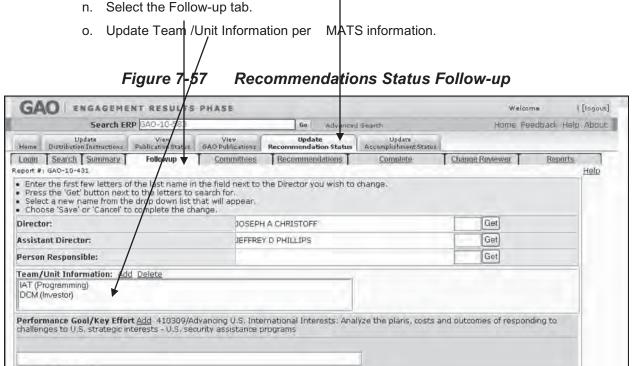
Table 7-5 Modifying MATS Error E-mail

Current Week's Email

Last Week's Email Figure 7-55 Modifying MATS Error Figure 7-56



- 3. For job code discrepancies, verify the PDF has the correct 6-digit job code as indicated in the e-
- 4. For team/role discrepancies, adjust the Doc DB record to reflect exactly what the MATS has.
- 5. If the report or correspondence has recommendations, update ERP.
 - m. Search for the Product under Update Recommendation Status.



Save | Cancel

The following **GAO Security Clause** is provided by the Office of Security for inclusion in all agreements made with non-GAO entities that involve access to information, property, or other assets or resources under the authority or control of GAO.

"Agreements" may be defined as: contracts, interagency agreements, and lease agreements.

"Non-GAO entities" may be defined as consultants, contractors, subcontractors, building tenants, and their respective employees.

Revision: April 9, 2013

GAO SECURITY CLAUSE

The security policies, procedures and requirements stipulated in the National Industrial Security Program (NISP); National Industrial Security Program Operating Manual (NISPOM); and any supplementals thereto are applicable. Also applicable are the Federal Acquisitions Regulation (FAR), and the GAO Order 0910.1, GAO Security Program, and supplemental GAO security directives.

References to the terms contract, contractor, and Contracting Officer's Representative (COR), should be substituted with company, sponsor, and GAO Point of Contact (POC), or other terms as appropriate to the type of agreement.

CITIZENSHIP

- 1. All employees on the contract who require access to information, property, or other assets or resources under the authority or control of GAO must either be U.S. citizens or have lawful U.S. permanent resident status.
- 2. It is the responsibility of the contractor to ensure that all employees on the contract meet the citizenship requirements and that proof of U.S. citizenship, permanent resident status, or employment authorization is provided to GAO's Office of Security (OS) upon request.

SECURITY SCREENING

- 1. All contract employees who require access to information, property, or other assets or resources under the authority or control of GAO (including classified or sensitive information) are subject to security screening, as appropriate, to support their work on a GAO contract. A background investigation commensurate with the level of the responsibilities and duties (referred to as position sensitivity level) is required for each contract employee assigned to the contract.
- 2. For national security positions, the contractor will validate the security clearance of each contract employees whose position requires access to national security information.
- 3. For positions of public trust, **OS** will adjudicate a contract employee's investigation, as appropriate to the employee's designated position sensitivity, for work on the contract and for access to information, property, or other assets or resources under the authority or control of GAO.
- 4. Security screening for building access alone does not grant a security clearance for access to classified information.

DETERMINING POSITION SENSITIVITY

The Contracting Officer's Representative (COR), in consultation with the Project Manager, will
determine the position sensitivity for all personnel assigned to the contract, and will identify such to
OS. GAO's Director of Security will determine the type of investigation for each contract employee
based upon the sensitivity level identified for his or her position. The following criteria will be used
for determining position sensitivity.

- a. <u>National Security Position</u>: A position that requires a security clearance to permit access to classified information which includes:
 - 1) information that has been specifically authorized under criteria established by an Executive Order (E.O.) or an act of Congress to be kept classified in the interest of national defense or foreign policy, including information classified under the terms of E.O. 12958.

Revision: April 9, 2013

- 2) access to a classified facility, which is any facility that requires a security clearance for admittance.
- 3) access to national security system.
- b. <u>Public Trust Positions and ADP-I, II, and III Positions</u>: A position, other than a national security position, in which **an individual's action or inaction could diminish public confidence in, or** otherwise have an adverse impact on the integrity, efficiency, or effectiveness of GAO or other government activities, whether or not actual damage occurs. Public trust positions shall be designated as high risk, moderate risk or low risk (for building access only).
 - 1) A <u>High Risk Public Trust Position</u> is a position whose occupant:
 - a) has final signature authority for GAO products or other documents that articulate official agency policies, positions, findings, or commitments;
 - b) has final signature authority for contracts of individual non-cumulative amounts of \$25,000 or more, or who obligates, controls, or expends individual, non-cumulative amounts of \$25,000 or more on behalf of GAO;
 - c) has duties that involve accounting, disbursing, or authorizing disbursement of funds;
 - d) is assigned to a staff or administrative office (i.e., Office of the Comptroller General (CG); Office of the Chief Administrative Officer (CAO); Congressional Relations (CR); Human Capital Office (HCO); Public Affairs (PA); Office of the Inspector General (OIG); or the Forensic Audits and Special Investigations (FSI) team), and who performs work that is generally not reviewed by higher authority;
 - e) **designs or manages GAO's maj**or information technology resources, and whose work is not regularly reviewed by higher authority;
 - f) has duties directly related to personnel security investigations or adjudications, or information security;
 - g) occupies a position as an Automated Data Processor I (ADP I; further defined as those positions in which the incumbent is responsible for the planning, direction, and implementation of a computer security program; major responsibility for the direction, planning, and design of a computer system, including the hardware and software; or, can access a system during the operation and maintenance in such a way, and with relatively high risk for causing grave damage, or realize a significant personal gain); or
 - h) is otherwise in a position with substantial responsibility for activities that have a significant potential for grave harm to the integrity, efficiency, or effectiveness of GAO or other government activities.
 - 2) A Moderate Risk Public Trust Position is a position whose occupant
 - a) is an analyst, analyst-related specialist, or attorney;
 - b) is directly involved in the production of GAO products or external audiences;
 - has duties involving financial management, contracting, or other procurement related activities, or human capital or related activates (e.g., of the Office of Opportunity and Inclusiveness);
 - d) has duties involving access to sensitive data (i.e., proprietary, personal, or federal agency sensitive but unclassified (SBU) information) that GAO has legal or contractual obligations not to divulge;

- e) has duties involving information technology management, planning, design, or maintenance;
- f) occupies a position designated ADP II or III; or
- g) is otherwise in a position that involves activities that have a reasonable potential for significant harm to the integrity, efficiency, or effectiveness of GAO or other government activities, but less than in a high risk public trust position.

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3) A <u>Low Risk Public Trust Position</u> is a position that is not designated as either a high risk or moderate risk public trust position.

NOTE: All contract employees are processed for a minimum of a Low Risk Public Trust Position due to their access to the GAO Building.

- 2. The COR will notify OS of changes in personnel duties as it affects a contract employee's designated position sensitivity requiring an increased investigation.
- 3. Annually, OS will provide a listing of all contract staff to the COR for validation.

BACKGROUND INVESTIGATION REQUIREMENTS

- 1. A background investigation commensurate with the position sensitivity level must be favorably completed.
 - **a.** A Single Scope Background Investigation (SSBI) conducted using the SF-86 is required for Top Secret national security positions and for high risk public trust positions.
 - **b.** A Moderate Risk Background Investigation (MBI) conducted using the SF-86 is required for Secret national security positions and an MBI conducted using the SF-85P is required for moderate risk public trust positions. A greater investigation or security questionnaire also meets the requirements.
 - **c.** A National Agency Check with Written Inquiries (NACI) is required for low risk public trust positions and for building access.
 - **d**. A Childcare NACI (CNACI) is required for contract employees of the GAO childcare center.
- 2. It is the responsibility of the contractor to ensure that employees whose positions require access to national security information possess a security clearance of the appropriate level prior to being assigned to work on the contract.
- **3.** GAO will process the appropriate background investigation for each employee assigned to public trust positions under the contract.

NOTE: Background investigations cannot be processed on individuals who do not possess a valid social security number (SSN). It is required that valid SSNs be provided to OS for each employee assigned to the contract.

ACCESS TO GAO FACILITIES

- 1. OS exercises full and complete authority and control over granting, denying, withholding, and terminating access of contract employees to GAO facilities.
- 2. All contract employees requiring access for 6 months or longer must undergo a favorable background investigation and be badged for building entry.
- 3. Contract employees requiring access for less than 6 months must undergo a favorable interim background investigation and be placed on the GAO Contractor Access List for unescorted entry into the facility.

4. Contract employees requiring one-time or short-term access must be signed in and out at the G Street pedestrian entrance, escorted, and under the continuous control of a permanently badged employee. Escorts will be fully briefed on their escort responsibilities and may only escort up to 5 personnel at a time.

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- 5. Background investigations conducted on contract employees will be consistent with the statement of work/contract.
- **6.** Temporary escorted employees must be kept to the minimum required for operational needs.
- 7. Until approved by OS for unescorted access, all contract employees must be escorted by a fully briefed, designated permanently badged employee. All escorted individuals must be within direct sight of their escorts at all times.
- **8**. All requests for contract employee access to GAO facilities must be submitted to OS by the COR.
- **9.** Determining eligibility for access to GAO facilities requires a National Agency Check with Written Inquiries (NACI), at a minimum. OS will perform a NACI for those contract employees without a currently valid investigation. Contract employees with a previous or existing investigation should be identified by the COR to OS during in-processing.
 - a. OS will provide to each employee the necessary personnel security background forms and instructions for completion of the forms.
 - b. All investigative forms must be completed and submitted to OS within 14 working days from the date the forms are provided by OS.
- **10.** Contract employees may be granted <u>interim unescorted access</u> based upon the results of a favorable national criminal history check, fingerprint check, the favorable review of the employee's completed personnel security questionnaire, and the initiation of the NACI investigation.
 - a. Failure to submit the completed investigative forms will result in the delay and/or denial of unescorted access.
 - b. Unfavorable information revealed during the review process may result in the delay and/or denial of unescorted access.
- 11. A final determination regarding a contract employee's access is made based on the completed NACI.
 - a. If the NACI returns with favorable information, the employee may be granted unescorted access for the term of the contract **or the employee's termination from** the contract, whichever comes first.
 - b. If the NACI returns with derogatory information that cannot be mitigated through the adjudicative process, the contract employee's access may be terminated.
- 12. Based on the contract employee's required access needs, approval for unescorted access may be granted with the issuance of a permanent building access badge (> 6 months), an interim access badge (< 6 months), or inclusion of the contract employee's name on the GAO Contractor Access List.
- **13**. If access is imperative to GAO operations, for a contract employee who does not meet the minimum investigative requirements of a completed NACI, the COR may sponsor a contract employee for temporary access for a single visit of up to 48 hours to GAO facilities, as follows.
 - a. Access is <u>under escort</u> by either the contract's COR or the project manager, if the latter has been issued a permanent GAO building access badge.
 - b. Only for purposes in direct support of the contract.
 - c. As approved for official purposes by the COR.

- d. As requested by the COR through OS at least 24 hours, or one full work day, in advance.
- e. For a single visit of longer than 48 hours, but not to exceed 7 days, the contract employee must pass a favorable National Crime Information Center (NCIC) check, in addition to meeting the criteria in paragraphs a. through d. above.

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f. Exceptions to policy for temporary access must be submitted in writing to GAO's Director of Security.

NOTE: Upon arrival at the building the contract employee must present a valid photo ID and will be issued a temporary escort required contractor badge.

- **14.** Once a decision is reached, whether favorable or unfavorable, OS will provide written notification to the contractor, through the COR. The COR must notify the contractor immediately if OS determines that a contract employee is unsuitable for his/her duties under the contract and, therefore, will not be permitted access to GAO facilities.
- 15. If approved to receive a GAO building access badge, a contract employee must appear in person at the OS ID Media office in the GAO Headquarters Building, or at a designated office in other GAO facilities (e.g., GAO field offices), and show two forms of identification in original form, with at least one being a valid state or federal government-issued picture identification.

INITIATING THE BACKGROUND INVESTIGATION

- 1. To initiate the background investigation, the COR will, for each employee assigned to the contract who requires access to GAO facilities, submit to OS:
 - a. a completed GAO Form 540A, Request for Approval of Unescorted Access for non-GAO Employees; and
 - b. a GAO Form 618A, Request for NCIC Check for non-GAO Employees, completed by the contract employee.
- 2. Upon receipt of the completed Form 540A and Form 618A from the COR, OS will provide to the contract employee, through the COR, instructions for:

Completing a personnel security questionnaire via the Office of Personnel Management's electronic-Questionnaires for Investigations Processing (e-QIP) system:

- 1) a Standard Form (SF) 85, Questionnaire for Non-Sensitive Positions for building access and Low Risk positions of trust;
- 2) an SF-85P, Questionnaire for Public Trust Positions, for Moderate Risk positions of trust; and
- 3) an SF-86, Questionnaire for National Security Positions for High Risk positions of trust;

Completing an Optional Form 306, Declaration for Federal Employment;

Completing a GAO Form 691, Authorization for Release of Personal Consumer Credit Information (as applicable to the person's position); and

Submitting completing forms and scheduling an appointment for fingerprinting.

- 3. The contractor is responsible for ensuring that each contract employee returns the completed documents, through the COR, to OS within 14 days from the date provided by OS, and that all information submitted is complete, accurate, and legible.
- **4.** Upon receipt of all completed forms, OS will forward the forms to OPM with a request for the conduct of the appropriate background investigation.

NOTE: The COR is responsible for ensuring that the current version of each required form is provided to the contractor for completion and submission to OS (current forms are available on the GAO Website).

AMENDMENT OF SOLICIT	TRACT	I. CON	ITRACT ID CODE	PAGE	1 OF 2		
2. AMENDMENT/MODIFICATION NO. PS39	PS39 03/15/2018 04:46:00 PM			PURCI	HASE REQ. NO.	5. PROJECT NO. (I	f applicable)
6. ISSUED BY GSA/FEDSIM Acquisition (QF0BC) 1800 F Street, NW, 3100 Washington, DC 20405 Contract Specialist Name: Jane B Contract Specialist Phone: 202-68	Facchina	CA	7. ADMINISTEREI	D BY (If other than item $\widehat{6}$) CODE	
8. NAME AND ADDRESS OF CONTRACT SRA INTERNATIONAL, INC. 4300 FAIR LAKES CT FAIRFAX, VA, 220334232 Phone: (703) 803-1500 Fax: (703	•	inty, State and ZIP Cod	e)	(X)	9B. DATED (SEE	ION OF CONTRACT	T/ORDER NO.
CODE	FACILITY				<u> </u>		
	11. THIS ITEM O	NLY APPLIES TO A	AMENDMENTS (OF SC			
The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers If is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning copies of the amendment; (b) By acknowledge receipt of this amendment on each of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and data specified. 2. ACCOUNTING AND APPROPRIATION DATA (If required) 285F.Q00FB000.AA10.25.AF151.H08 Total Amount of MOD: \$0.00 13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS.							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED (appropriation date, etc.) SET F	ORTH IN ITEM 14, F	PURSUANT TO THE AL	JTHORITY OF FAI	R 43.1		such as changes in լ	paying office,
X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.103(a)(3), Mutual Agreement, FAR 52.243-2, Changes - Cost-Reimbursement							
			- Cost-Reimbu	rseme	ent		
D. OTHER (Specify type of mo		J,	t and ratura		to the issuing office		
E. IMPORTANT: Contractor is not, is required to sign this document and return copies to the issuing office. 14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) See SF30 Continuation Page Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect. 15A. NAME AND TITLE OF SIGNER (Type or print) 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Nydia Roman-Albertorio							
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STA				16C. DATE SIGNED
			Nydia Roman-	Alber	torio		03/15/2018 04:46:00 PM
(Signature of person authorized t	o sign)		(5	Signatu	re of Contracting Offic	er)	

PAGES

			Line I	tem Summary			
TEM NO.	SUPPLIES OR SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	Rev. Ext. Price	Prev. Ext. Price	Amount Of Change
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
0001	Prime Contractor Labor - All Task Areas (\$10,996,166.22)	1.0	lot	(b) (4)			
0002	Subcontract Labor Costs - All Task Areas (\$5,835,000.65)	1.0	lot				
0003	Travel (\$10,000.00)	1.0	lot				
0004	Tools (\$8,860,000.00)	1.0	lot				
0005	Contract Access Fee (\$100,000.00)	1.0	lot				
1001	Prime Contractor Labor - All Task Areas (\$12,168,050.32) Subcontract Labor Costs - All Task Areas (\$6,932,335.00)	1.0	lot				
1004	Tools (\$ 8,860,000.00)	1.0	lot				
1005	Contract Access Fee (\$100,000.00)	1.0	lot				
2001	Prime Contractor Labor - All Task Areas (\$11,709,398.44) Subcontractor Labor (No Fixed Fee) All Task Areas to include Indirect Handling Rate 3.51% (\$6,956,395.00)	1.0	lot				
2004	Tools (\$ 8,860,000.00)	1.0	lot				
2005	Contract Access Fee (\$100,000.00)	1.0	lot				
3001	Prime Contractor Labor - All Task Areas (\$15,476,255.13) Subcontractor Labor (No Fixed Fee) All Task Areas to include Indirect Handling Rate 3.51% (\$6,907,741.00)	1.0	lot				
3004	Tools (\$8,860,000.00)	1.0	lot				
3005	Contract Access Fee (\$100,000.00)	1.0	lot				
4001	Prime Contractor Labor - All Task Areas (\$18,177,303.24) Subcontractor Labor (No Fixed Fee) All Task Areas to include Indirect Handling Rate 3.51% (\$7,046,885.00)	1.0	Lot				
4003	Travel (\$10,000.00)	1.0	Lot				
4004	Tools (\$8,860,000.00)	1.0	Lot				
4005	Contract Access Fee (\$100,000.00)	1.0	Lot				
	•			TOTALS:	\$116,503,073.68	\$116,503,073.68	\$0.00



United States Government Accountability Office

Contract Number: GS00T99ALD0211 | Task Order Number: GST0007AJM082

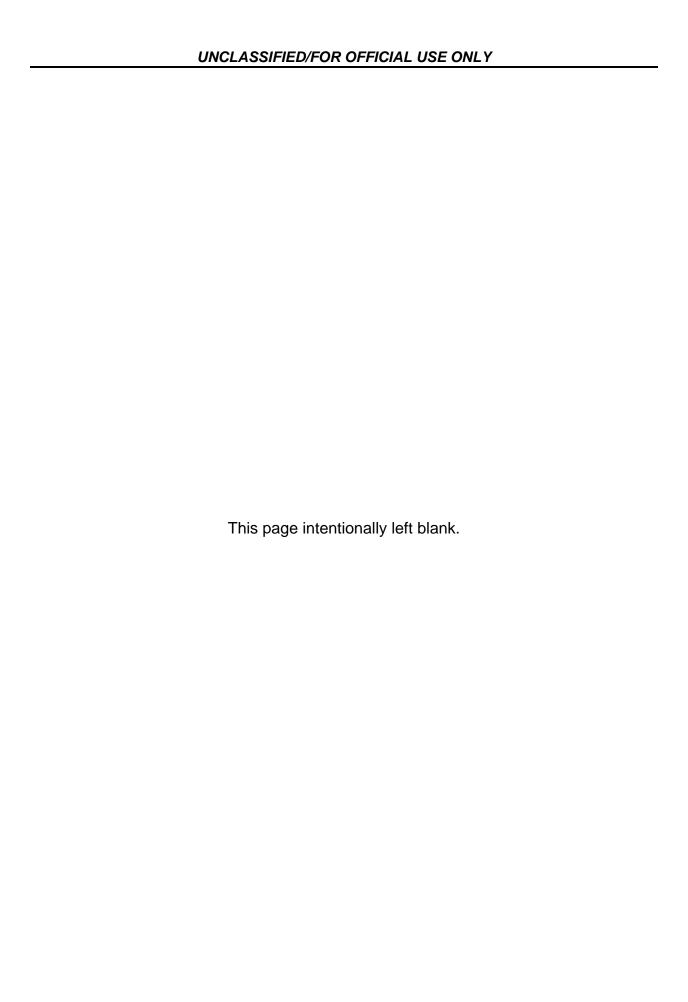
GAO IMPD Web Operations Standard Operating Procedures Manual

Version 2.0

February 3, 2012

DM# 2258764

Prepared for: U.S. Government Accountability Office 441 G Street, NW Washington, DC 20001



Document Change History

Version	Date	Author	Change Description
1.0	7/8/2011	Gasana, Eusebio	New version entered into DM
1.0	7/19/2011	Messina, Stephanie	Made content revisions
1.0	8/2/2011	Gasana, Eusebio	Made content revisions; added content to new sections; reformatted text; and updated references
2.0	1/25/2012	Gasana, Eusebio	Made content revisions; added content to new sections; reformatted text; and updated references
2.0	2/3/2012	Leitzel, Valerie	Submitted final version to GAO for review

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List of Acronyms and Abbreviations

Acronym	Description
ВРО	Business Process Owner
СВО	Congressional Budget Office
CD	Compact Disc or change directory
СНОВ	Cannon House Office Building
COTR	Contracting Officer Technical Representative
COTS	Commercial-off-the-Shelf software
CR	Congressional Relations
CRS	Congressional Research Services
CSR	Customer Service Representative
DDC	GAO Document Distribution Center
DM	The document management system used by GAO
DOS	Disk Operating System
DSOB	Dirksen Senate Office Building
ERP	Engagement Results Phase
FASAB	Federal Accounting Standards Advisory Board
FHOB	Ford House Office Building
FTP	File Transfer Protocol
GAO	Government Accountability Office
GPO	Government Printing Office
GSA	Government Services Administration
H2	Heading Size
HSOB	Hart Senate Office Building
HTM	File extension for HTML file
HTML	HyperText Markup Language
HTTPS	Hypertext Transfer Protocol over Secure Socket Layer
IJ	International Journal
IMPD	Information Management and Product Dissemination
INT	Internal
ISFTP	ISFTP is a program that connects to a remote SFTP server, and can be used to upload download files ['a] la FTP
ISTS	Information Systems and Technology Services
ITSC	Information Technology Support Center

Acronym	Description
k bytes	Kilobytes (1000)
KS	Knowledge Services
LDAP	Lightweight Directory Access Protocol
LH	Legislative History
LHOB	Longworth Post Office
LOC	Library of Congress
MIR	Month-in-Review
MRT	Maximum Return Time
N/A	Not applicable or Not available
NATO	North Atlantic Treaty Organization
NI	Not Internet
OGC	Office of the General Counsel
ОНОВ	O'Neill House Office Building
OMB	Office of Management and Budget
OP	Operating Procedure
PA	Public Affairs
PAG	Product Assistance Group
PCI	Proposed Change Impact
PDD	Planned Document Distribution
PDF	Portable Document Format
PHP	Personal Home Page (original name) – server-side HTML embedded scripting language
PL	Public Law or Perl (File extension)
PMR	Product Metadata Repository
PMTS	PAG Management & Tracking System
PTS	Product Tracking System – Tracks the ad hoc Congressional Courier delivery system
QA	Quality Assurance
QCI	Quality and Continuous Improvement
REST	Representational state transfer
RHOB	Rayburn House Office Building
RMM	Ranking Minority Member
RSA	An algorithm for public-key encryption that is used at the time of login to a software
RSOB	Russell Senate Office Building

Acronym	Description
SBU	Sensitive But Unclassified document
SKU	Stock Keeping Unit
SOP	Standard Operating Procedures
SPEL	Strategic Planning and External Liaison
SQL	Structured Query Language
SRA	Systems Research and Applications Corporation
SSH	Secure Shell
STD	Standard
TDD	Telecommunication Device for the Deaf
TIFF	Tagged Image File Format
TPOC	Technical Point of Contact
TR_DM	The data management system used by GAO
URL	Uniform Resource Locator - An address on the World Wide Web
WAIS	Wide Area Information Server
WebOps	Web Operations
WSG	Web Services Group
YTD	Year-to-Date
YYYY	Four digit format for the year, e.g., 2012

Section 1 Introduction

1.1 Purpose

This document describes the standard operating procedures (SOP) for GAO IMPD Web Operations. The purpose of each of the functions is highlighted in Section 2.0 and presented in detail in the referenced section. This is a living document and will continue to be updated as processes and procedures change.

1.2 Scope

The scope of this document is to provide the key steps in executing the web operations standard operating procedures and to present the scope of tasks required daily, weekly and monthly, and for irregular ad hoc tasks.

1.3 Document Organization

This document consists of 11 sections:

- Section 1 provides details on the purpose, scope and organization of this document.
- Section 2 provides a brief overview of Web Operations tasks.
- Section 3 provides an overview description of the Product Metadata Repository application.
- <u>Sections 4 through 7</u> detail the tasks undertaken on a regular basis: daily, weekly, and monthly, and annually, respectively.
- Sections 8 through 9 cover maintaining and updating the public website, respectively.
- <u>Section 10</u> explains the compliance procedures for the Section 508 amendment to the Rehabilitation Act of 1973 which mandates product dissemination for the visually impaired.
- Section 11 gives the steps in processing an electronic report (E-Report).

1.4 References and Relationship to Other Documents

This document is stored and maintained in the Hummingbird Document Management system (DM# 2258764).

1.5 Maintenance of this Document

When business processes are modified or enhanced, changes shall be noted in the "Document Change History" (page iii). A Web Operations staff member updates the document as needed and presents the document change to the IMPD Tier 2 Content Services Team Manager who reviews and approves the changes. The changes will then be reviewed with the appropriate business process owner (BPO) from GAO. Once they are approved, the changes will be formally adopted into the document.

1.6 Accessibility

The IMPD contract needs to ensure that the GAO website is Section 508 compliant in all aspects. This includes putting alt tags behind images and spot checking various pages for compliance.

Section 2 Purpose

Web-based GAO resources (currently GAO Internet and Intranet sites) play a significant role in supporting GAO information management and dissemination efforts. The IMPD contract supports the agency in its efforts to maintain and develop these web-based resources. GAO seeks to provide its internal and external audiences with the best possible service in terms of information accuracy, timeliness, usability, and accessibility.

The document is organized by the frequency of task demands (Daily, Weekly, Monthly, and Yearly). The following are the tasks and a brief explanation of their function.

2.1 Product Metadata Repository

The Product Metadata Repository (PMR) is a data engine that stores all product content for GAO. It is used to distribute such content to a wide array of output formats such as HTML web pages, podcasts, and publications.

2.2 Daily Tasks

The following is a brief explanation of each of the tasks performed on a given day.

2.2.1 Monitoring the WebOps Mailbox

Tier 2 Management and staff are responsible for checking the WebOps@gao.gov mailbox several times a day (at least once per hour) for new web-related requests and/or tickets forwarded to Tier 2 from the ISTS Help Desk. Tier 2 team members will need to be able to read and send from this mailbox. Submit a Help Desk ticket to HelpMe@gao.gov for this access.

2.2.2 HTML File for Legal Products

WebOps staff is tasked with creating HTML versions of legal products to be posted to the public site along with their PDF version.

2.2.3 Archiving the Files after Web Posting

After all the legal products have been posted online, WebOps archives the processed files associated with them in the U; drive folder.

2.3 Weekly Tasks

The following are brief explanations of the tasks performed weekly.

2.3.1 Management News

Management News contains information on recently issued products and affairs within GAO. The issue is posted to the GAO internal website every Thursday, and a listserv message is sent to internal staff and GAO retirees that have subscribed to the Management News list per Public Affairs. Instructions for posting the web page and generating the listserv message are provided in Section 4.1.

2.3.2 Web Stats Instructions

The web stats process collects data on traffic on the public website. Specifically, the data is pulled from web logs kept on GAO servers. It informs GAO groups how many people visited their websites; times and dates of most site traffic; what directories and pages are the most popular; and the domain origins of the web traffic. The stats are posted on http://escher-new.gao.gov/stats/www/. They can help GAO groups determine ways to maintain and improve their sites. The procedures are provided in section 4.2.

2.4 Monthly Tasks

The following is a brief explanation of each of the tasks performed monthly.

2.4.1 Press Top Ten

GAO releases the "Top 10 List of Significant Work Made Publicly Available" once a month. The list is posted to the external website at the beginning of the month prior to the Month-in-Review listserv message. The list is provided by the Office of Public Affairs in an e-mail sent to the WebOps mailbox. For more information on posting this list, see Section 5.1.

2.4.2 Month-in-Review

Aside from the daily e-mail updates that WebOps maintains (for audit product and GC product issues), WebOps also maintains the monthly Month-in-Review e-mail update. It contains the reports, testimonies, correspondence, legal products, and other publications made publicly available during the previous month, grouped according to subject categories. The Month-in-Review listserv message is sent before the Month-in-Review web page is posted. The listserv message must be released by the fifth working day of the month. For information on the process of generating the Month-in-Review listserv, see Section 5.2, Month-in-Review listserv message tasks.

2.4.3 Active Assignments

The Active Assignments website housing ongoing GAO investigations/audits is used by Congress to keep apprised of GAO work. In the middle of the month, the Active Assignments site on the GAO watchdog server is updated. Instructions for updating the site are included in Section 5.4.

2.4.4 Listserv Reports

An e-mail message reporting the number of listserv subscribers per list is sent to the appropriate GAO staff on the fifth of the month. For more information, see Section 5.5, Listserv Reports.

2.5 Annual Tasks

The following is a brief explanation of each of the tasks performed yearly.

2.5.1 Bid Protest Annual Report

The Bid Protest Annual Report summarizes the entire docket of bid protest decisions issued in the year. It is posted at the end of the fiscal year.

2.6 Maintenance

2.6.1 Listserv List Maintenance

This section explains how to add and remove users from certain electronic mailing lists. It also contains instructions on how to modify listserv message footers for different lists.

2.6.2 Web Page Maintenance

This section contains instructions for updating and maintaining the various web pages on the external GAO website.

2.7 Updating

2.7.1 Legal Products Index Pages

This section explains how to update Legal Products Index pages and issues related to updating those pages.

2.7.2 Yellowbook Pages

This section explains how to update Yellowbook pages and issues related to updating those pages.

2.7.3 Topic Lists

In addition to sending out the Daybook listserv, IMPD also sends out Topic Listservs to users who are interested in specific topic areas of GAO work.

2.7.4 "Welcome to GAO" Box

In the event that GAO is closed, usually due to inclement weather, the "Welcome to GAO" box content will be removed and a notice about the operating status of GAO will be put in its place.

2.7.5 Mobile Website

GAO has a mobile version of its public website that contains recently issues GAO products, recently issued GC decisions, the In the Spotlight section, and searching capabilities. The majority of these sections update automatically. Details for updating this are included in this document.

2.8 508 Compliance

When IMPD makes any changes to a GAO website IMPD must also ensure that change meets Section 508 accessibility requirements.

2.9 E-Reports

GAO issues a new web-based version of some audit products. The version allows easy navigation of the various sections of the content. This section outlines the procedures of generating the E-Report as part of the whole audit product processing.

Section 3 Product Metadata Repository

The Product Metadata Repository (PMR) is a custom web application for GAO designed to store, maintain, and distribute product information for all products created and used at GAO.

The PMR system is built on an open, scalable and flexible architecture that provides access to all data to other applications within GAO's network via industry standard REST interfaces and web services.

Product

A product is defined as a collection of data that can then be controlled in a number of ways. Examples of products include Publications, Legal Decisions, Press Releases, Podcasts, and Videos.

Metadata

The data collected for each product varies according to the type of product. A publication will have a title, release dates, a description, PDF file attachment, and more, while a podcast may have a title, runtime and MP3 file attachment. The specific data collected can be set and updated at any time within PMR. New product types can be created at any time within PMR.

Some audit products can have their complete Microsoft Word source file imported into PMR. In this case, the full content of the report is automatically converted to HTML for future display in various output formats.

Repository

Once a product has been approved within PMR, it may be available for distribution. Distribution is the process of approving and then moving a copy of the product to various locations. A podcast record can move to www.gao.gov for display; from there it is relayed to iTunes. Audit products may be moved to Watchdog—the secure network available to Congress—or pre-released on www.gao.gov before being moved to www.gao.gov proper where it will become searchable, appear in the various feeds (Twitter, Facebook), appear on the mobile site and mobile iPhone application. Legislative History products may be distributed to GAO's Intranet to be made available for internal GAO librarian use.

The products also get a highlights page and appear in the home page Recently Issued Products box. If the product had the full report imported from Microsoft Word, the full content of the report is available in HTML format from the summary page. This is currently known as an "E-Report".

In addition to distribution of products to web sites, PMR provides an email communication system that allows users to send emails to requestors and other recipients.

Subversion is here: https://svnwebops.gao.gov/websvn/listing.php?repname=mdr&

Section 4 Daily Tasks

The following are on-going throughout the day. The staff responds to e-mails in Webmaster inbox and check WebOps inbox. The following is a detailed explanation of each of the tasks performed on a given day.

4.1 Monitoring the WebOps mailbox

Tier 2 Management and staff are responsible for checking the WebOps@gao.gov mailbox several times a day (at least once per hour) for new web-related requests and/or tickets forwarded to Tier 2 from the ISTS Help Desk. Tier 2 team members will need to be able to read and send from this mailbox. Submit a Help Desk ticket to HelpMe@gao.gov for this access.

4.2 HTML File for Legal Products

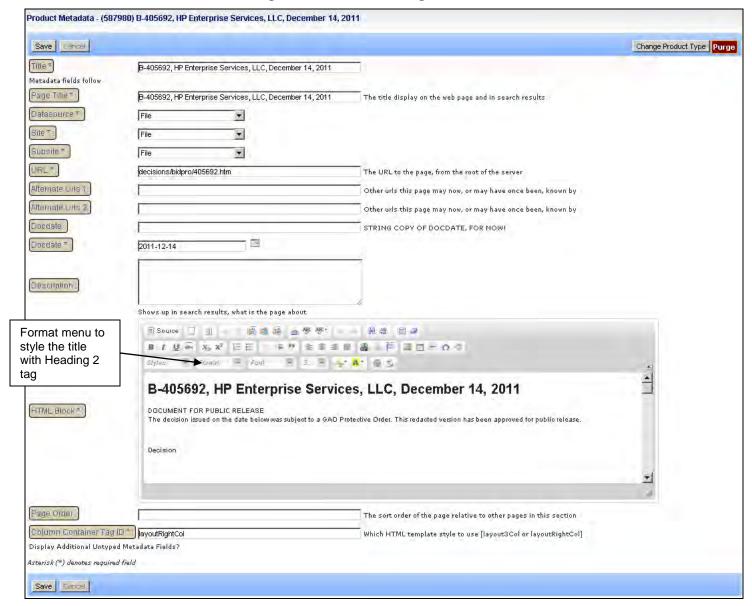
Legal products are posted online with its HTML version. It is created in PMR as a child record of the parent legal product. The procedures for processing that HTML version are given below.

4.2.1 Creating PMR Child Record of Legal Product HTML files

- 1. Save the Word source file for the legal product as "Web page filtered."
- 2. Open in Adobe Dreamweaver, and perform the following editing steps:
 - a. Proof parties section for line breaks.
 - b. Proof paragraph breaks throughout.
 - c. Add block quotes.
 - d. Center tables.
- 3. In PMR, click Create New Product page on the Dashboard and enter the following information:
 - Product Type: Web Page WWW Special Section.
 - Title in the following format: [The B-number], [Protesting Agency], [Date]
- 4. On the Metadata tab of the new product, enter in the following information:
 - Page Title: Same as the Title
 - Datasource: File
 - Site: File
 - Subsite: File
 - URL: Enter it in the following format as the example: decisions/bidpro/405692.htm
 The file name is the B-number of the product without the B- and with the HTM extension.
 - Docdate: The date printed on the PDF version of the product in YYYY-MM-DD format
 - In the HTML Block, type in the following:
 - First Line: Title
 - Paste the Title (from the Title field mentioned above).
 - Style it with Heading 1 format tag.
 - Following Lines:
 - Paste content from Dreamweaver.
 Do not include extraneous DIV tags at the end of code.

Below is an example of a populated metadata page of an HTML page record:

Figure 4-1 HTML Page: Metadata



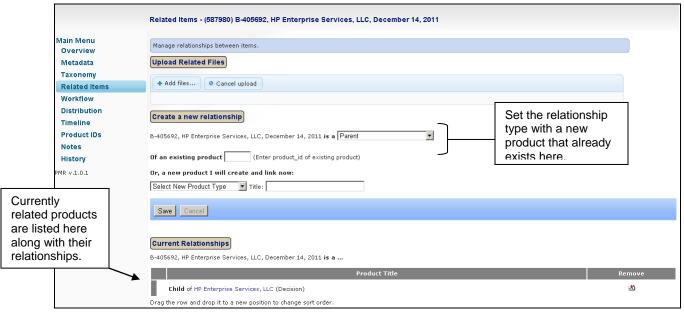
5. Save the Metadata page.

4.2.2 Relating PMR Child Record of Legal Product HTML files

Once the relationship with the parent record has been established, it will be listed under the Current Relationships section. (See the Figure 4-2 below.)

1. To link the record to its parent record, go to the Related Items tab.

Figure 4-2 HTML Page: Related Items



- 2. Under the Create a new relationship section, change the relationship from Parent to Child.
- Enter the PMR product_id number of the parent record in the Of an existing product field on the next line.

Leave the following lines below that blank. That feature allows for creating and relating a product at the same time.

Click Save.

4.2.3 Quality Checking the PMR Child Record of Legal Product HTML files

- 1. Perform a quality check of the HTML page by selecting the parent product under Current Relationships, and going to its Distribution tab.
- 2. Click on the Run Now (or Re-Run Now) Action Button for the WWW [DEV] channel.
- 3. Perform a quality check of the Decision record in the development instance of the public website: wwww-dev.gao.gov.
- 4. Once the QA is done, the product is ready to be posted online.

See section 4.3 below for details on the posting process.

4.3 Posting Products to Public Site

After IM has QA'd the record for a GAO product (legal, audit, or special product), perform the following procedures to post it to the public website.

Note: Perform this task after the unrestricted and restricted audit products have been gone through the distribution process. For further information on that, please see the IMPD Information Management Standard Operating Procedures (DM# 138864).

- 1. Login to the Product Metadata Repository (http://pmr.gao,.gov) via normal RSA login.
- 2. Search for the product, by clicking on the Find a Product link on the dashboard
- 3. Enter in the product number or PMR product id number.
- 4. Go to the Distribution tab.

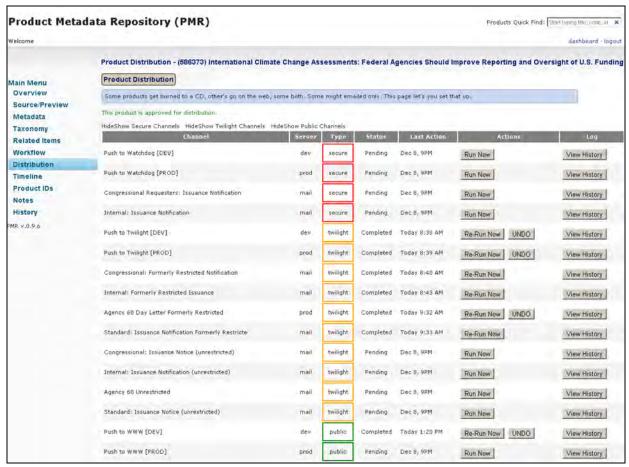


Figure 4-3 PMR Distribution Tab

Click the Action button for WWW [DEV].

This will generate a summary web page for the product on GAO's development website (http://www-dev.gao.gov) where you can QA it before publishing it to the public website.

Note: The Action button may be "Run" or "Re-Run Now." Re-running any distribution channel indicates that it had been selected before. Whenever any content changes are made, distribution channels must be re-pushed so that the changes can be reflected via the output environments.

6. Once the summary web page for the product has been reviewed, return to the Distribution tab of the record, and select the action button **WWW [PROD]**.

This will generate a summary web page for the product on GAO's public website: www.gao.gov.

The address for posted products will be in the same format as the following example: http://www.gao.gov/products/GAO-12-113

4.4 Archiving the Files after Web Posting

Once all the products have been posted to the public website, archive the files accordingly:

- <u>For Decisions</u>: For all file types, copy HTM, Word, and PDF files to the folder generated by converting the word file to HTM. Place the decision folder in the appropriate FY_yy subfolder (where yy represents appropriate fiscal year). After the decisions have been posted, the source files should not remain where they were placed to be posted.
- For Daybook products: Run cleanup.bat located in x:\isc\projects\isc\gaoreps\daybook\. When you are prompted for input, enter the date in *yymmdd*-daybook.

Section 5 Weekly Tasks

The following is an explanation of the tasks performed on a weekly basis.

5.1 Management News

Management News is issued every other week on Thursday. The issue is posted to The GAO internal website, and a listserv message containing a text version of the issue is sent to retirees that have subscribed to the Management News list. Instructions for posting the web page and generating the listserv message are provided in this section.

Management News is processed and issued on Thursdays. Sometimes it is transmitted to WebOps on Wednesday for posting on Thursday.

- 1. Open the WebOps mailbox and look for Senior Public Affairs Specialist's Management News message.
- 2. Save the TXT attachment and PDF attachment as well as any attached image files to a designated work area on your workstation.
- 3. Rename the PDF attachment mnxxxx.pdf.

5.1.1 Creating Web Page for Current Issue

Use the following steps to create a web page for the current issue:

- 1. Check the second line of code in the text file.
 - a. It begins with "<volnum>" and ends with "<r>."
 - b. Add "Weeks of" just before the first date on that line, if it is not already there.
- 2. Open the TXT attachment.
- 3. Copy all of the source code.
- 4. Log in to the Intranet admin page at https://intranet.gao.gov/admin/login.

On the left, you should see "Main Menu" followed by a list. In the list, find "Management News." If you do not see "Main Menu," select "dashboard" in the right upper corner of the page to view "Main Menu" list. (If "Management News" is not visible in the list, you have not yet been authorized to post Management News.)

- Select "Management News."
- From the left side of the page, select "Start a new issue."
- 7. Paste the source code into the text area, and select "Process Text."
- 8. Select the "Upload PDF" tab (above the text area). Browse for and save the PDF saved from the e-mail earlier for this issue.
- 9. "Find an Issue" from the left side of the page. Locate the issue line and select "HTML" (over to the right). Upload the images and position the caption appropriately. An image must first be imported into the content management system (CMS) before it can be inserted into the Management News page. See "Loading Images" at the end of this section. Once the image is in the system, it can be inserted into the page using the yellow icon above the text area.
- 10. Review the HTML. Some of the URLs are not linked. Search on "http" to locate URLs. For each unlinked URL:
- 11. Select the text for the URL. Copy it but keep it selected.

- 12. Click on the globe/paperclip icon above the content.
- 13. Under "Link Type", select URL. In the text box under "URL," paste the URL. Do not add extraneous spaces at the end of the URL.
- 14. Make sure to save the HTML as you work. Saving takes you away from the HTML editor to the "Upload PDF" page.
- 15. Select preview (to the right) for the issue you created. Verify the left navigation links.
- 16. Select the "Preview" tab.
- 17. Make sure that the "Download printable version" link opens the PDF file.
- 18. Look at the content to make sure that sections are not running together.
- 19. If there are images, make sure that they appear and that the captions are positioned appropriately.
- 20. Check the links to make sure that they work and lead to the appropriate page. Also, make sure that none of the links are links to a page on a test server.
- 21. For each reference to a publication, compare the publication date and title on the publication to those provided in the issue. Record discrepancies to report to the Senior Public Affairs Specialist (by e-mail).
- 22. In responding, the Senior Public Affairs Specialist will usually send a revised PDF with entries that agree with the publication title and date. Edit the HTML to reflect changes approved by the Senior Public Affairs Specialist and load the revised PDF.
- 23. Select "Find an Issue." For the current issue, the image under status will show a red light. Click on the symbol to publish the issue. The image will display a green light.
- 24. Log out.

5.1.2 Image Handling

If an image needs to be added to the issue.

- 1. Place cursor where image should be.
- Select image icon (yellow icon with a mountain and a sun).
- 3. Select browse server.
- 4. Select images folder.
- 5. Select management news folder.
- 6. Select icon at top (scroll to right) to upload file.
- 7. Check small box under image.
- 8. Click on "select" tab on left.
- 9. Add alternate text.

Note: Sometimes the window that opens for loading the image (after you click on "browse server") opens behind other windows. The effect is that it seems as though clicking "browse server" does nothing.

5.1.3 Creating E-Mails for Current Issue

Compose two e-mail messages (one for the listserv and one for the Senior Public Affairs Specialist). Finish formatting the e-mails as instructed below and then send them.

As Webmaster (from the Webmaster account), compose two e-mail messages (one to send to the mgmtnews listserv and one to send to the Senior Public Affairs Specialist).

For each e-mail, do the following:

- Subject line: Management News, Month dd, yyyy
 - (This can be copied from the Subject line of the e-mail from Senior Public Affairs Specialist).
- Body: Copy "In this issue:" and the associated list found in the e-mail in which the Senior Public Affairs Specialist transmitted the current Management News issue files.
- Attach the current Management News issue PDF to each e-mail.
- For the e-mail being sent to Senior Public Affairs Specialist, add after the "In this issue:" list, the lines.

Current GAO employees may also view this issue at the following URL: http://intranet.gao.gov/home/management_news.

Copy GAO Technical Point of Contact (TPOC) and Web Services Group (WSG) Director on the e-mail to the Senior Public Affairs Specialist.

Send the appropriate Management News e-mail to Senior Public Affairs Specialist.

Before sending the Management News e-mail to mgmtnews@listserv.gao.gov, make sure that the PDF is attached. Note that, in the e-mail sent to mgmtnews@listserv.gao, the following two lines should NOT appear:

If in any way possible, have a second person check the e-mails before you send them.

See the following sample e-mails.

Table 5-1 Example of Management News ListServ Message

From: Webmaster

To: mgmtnews@listserv.gao.gov

Subject: Management News, June 16–20, 2003

Content:

In this issue:

- -- A Salute to GAOers in the Armed Forces
- --CG Chat: Updates on Current Issues
- --FMA Passes Fourth Peer Review
- -- A Visit from China's Auditor General

See attached pdf.

Table 5-2 Public Affairs Specialist Management News Email

From: Webmaster

To: Public Affairs Specialist

Cc: GAO Technical Point of Contact and the WSG

Group Director,

Subject: Management News, June 16–20, 2003

Content:

In this issue:

-- A Salute to GAOers in the Armed Forces

-- CG Chat: Updates on Current Issues

--FMA Passes Fourth Peer Review

-- A Visit from China's Auditor General

Current GAO employees may also view this issue at the following URL:

http://gaoweb.gao.gov/mnews/mn3234.htm

See attached pdf.

5.2 Web Stats Instructions

The web stats process is a process that collects basic web statistics on each GAO server every Monday morning. The web stats script is run to gather this statistical information from each of the web logs kept on GAO servers. The type of information that is collected from the web logs are typically how many hits a website has, what time and date shows the most traffic, what directories and pages are the most popular and what domains the web traffic is coming from generally. The stats are posted on Escher.gao.gov for the employees of GAO to view their sites traffic. The information shown in the web stats can help a group in GAO analyze how people are using their website and can give insight how to make the most out of their website.

The process is run every Monday morning.

- 1. Load keys in pageant.
- 2. Login to Inxpro2 in putty.
- 3. Log in to the Linux server (might have to make the instruction indicate a specific server).
 - a. To run stats, ssh to Inxpro2a from account escherops and run stats.sh script as follows: ssh escherops@Inxpro2a.gao.gov stats.sh escherops 20090816 20090823 (applicable Sunday to Sunday)
- 4. Check results on http://escher-new.gao.gov/stats/www/ after script has run on for dates being correct and that it ran correctly for the time period asked for.
- 5. If there any issues with the stats not showing up correctly, contact Linux support.
- 6. Once issue is found and corrected, rerun stats.sh and QA output on http://escher-new.gao.gov/stats/www/.

Section 6 Monthly Tasks

The following are monthly tasks performed with a detailed explanation of each of the tasks performed.

6.1 Press Top Ten

The top ten areas of significant work and the reports and testimonies in those areas are posted after a month ends. This task is performed at the beginning of the current month and posted before the Month-in-Review (MIR) is released to the public. The Press Top Ten page should be completed as soon as possible because the draft Month-in-Review cannot be sent to the Knowledge Services staff for review until the Press Top Ten has been completed and reviewed by the Information Management team.

Look for an e-mail from someone in the Public Affairs Office and with "Top Ten" in the subject line.

The e-mail usually comes from a Public Affairs specialist.

The e-mail from the Public Affairs office contains a list of audit products.

Go the PMR record for each audit product listed.

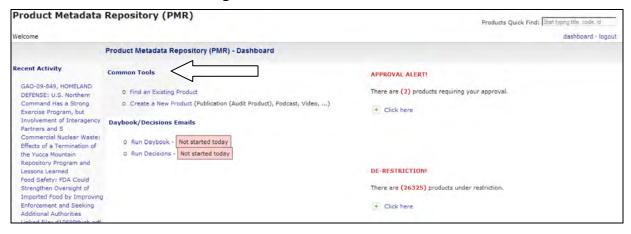
- To access PMR, launch a web browser and go to PMR website: http://pmr.gao.gov/.
 The Login page below appears.
- 2. Login by typing in the following for the fields:
 - Login: User's NT login name.
 - Password: User's PIN + 6-Digit RSA Token Number.



Figure 6-1 PMR Login Screen

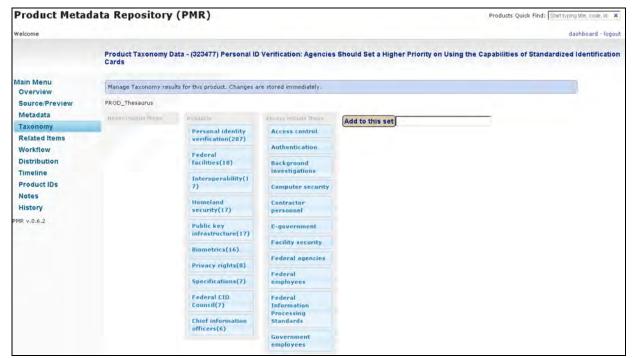
3. Search for each product on the list by going to the **Find an Existing Product** on the Dashboard under Common Tools.

Figure 6-2 PMR Dashboard



4. In the Taxonomy tab, scroll down to the PROD_Collection section. (See Figure 6-4.)

Figure 6-3 Taxonomy tab



5. In the "Add to this set" field, search for "Press/Top Ten," and select it from the drop-down menu. The term will appear under the Always include these column of the PROD_Collection section. This flags the product as an item on the Top Ten List to be available on the public site.

Figure 6-4 Taxonomy Tab: Collection Section



- 6. Go to Distribution tab.
- 7. Push the Run Now (or Re-Run Now) Action button of the **WWW [DEV]** channel.

Product Metadata Repository (PMR) Products Quick Find: Start typing file, same, is X dashboard - logou Product Distribution - (97345) Status of Fiscal Year 2010 Federal Improper Payments Reporting **Product Distribution** Main Menu Overview Some products get burned to a CD, other's go on the web, some both. Some might emailed only. This page let's you set that up Source/Preview This product is approved for distribution Metadata HideShow Secure Channels HideShow Twilight Channels HideShow Public Channels Taxonomy Actions Channel Server Type Status Last Action Log Related Items Push to Watchdog [DEV] secure dev Pending Oct 7, 6PM View History Workflow Run Now Distribution Push to Watchdog [PROD] secure Pending Oct 7, 6PM Run Now prod View History Timeline Congressional Requesters: Issuance Notification Product IDs mail secure Pending Oct 7, 6PM Run Now View History Internal: Issuance Notification mail secure Pending Oct 7, 6PM Run Now View History History Push to Twilight [DEV] dev Pending Oct 7, 6PM Run Now MR v.0.8.0 View History Push to Twilight [PROD] wilight Pending Oct 7, 6PM Run Now View History Congressional: Formerly Restricted Notification Pending Oct 7, 6PM View History Internal: Formerly Restricted Issuance Pending Oct 7, 6PM View History Agency 60 Day Letter Formerly Restricted Pending Vesterday 10:07 AM RESTRICTED Channel reserved for non-formerly-restricted products View History Standard: Issuance Notification Formerly Restricte Pending Oct 7, 6PM View History Congressional: Issuance Notice (unrestricted) Pending Oct 7, 6PM vilight Run Now View History Internal: Issuance Notification (unrestricted) Pending Oct 7, 6PM mail Run Now View History Agency 60 Unrestricted mail wilight Pending Yesterday 11:09 AM Run Now View History Standard: Issuance Notice (unrestricted) mail Pending Oct 7, 6PM View History Run Now Push to WWW [DEV] dev public Completed Tue Dec 6, 4:01PM Re-Run Nov View History Push to WWW [PROD] prod public Pending Nov 30, 10AM View History Run Now

Figure 6-5 Distribution tab

- 8. Go to the dev instance of the public website: http://www-dev.gao.gov/press/topten.html.
- 9. Verify that the list is bucket terms in black type face next to each number of the list are in alphabetical order, and that there are just ten items.
- 10. After QA, return to the PMR Distribution channel of the product, and push the Run Now (or Re-Run Now) Action button of the **WWW [PROD]** channel.

This will publish the list to the public website: http://www.gao.gov/press/topten.html.

6.2 Month-in-Review

The Month-in-Review (MIR) contains the reports, testimony, correspondence, legal products, and other publications made publicly available during the previous month, grouped according to subject categories. The MIR listserv is sent before the MIR web page is posted. The listserv message must be released by the fifth working day of the month. For information on the process of generating the MIR listserv, see Section 5.2, Month-in-Review listserv message tasks.

The MIR listserv message is sent on the first business day of the month.

The process described below is still being worked out to some extent and requires a review process at present. Prior to sending out the listserv message perform the review procedures below:

6.2.1 Internal Draft Review Process

- 1. Generate the listserv message by logging in to the WCM by going to the Intranet Admin page: https://intranet.gao.gov/admin/login; selecting the "Manage WWW Topic Emails" in the "Manage WWW Menu," and selecting the "Send MIR Email."
- 2. This will generate the MIR and send it to the MIR listserv. The listserv will send a confirmation request to webmaster with the MIR e-mail attached to it.
- 3. Copy and MIR e-mail message and paste it into two new e-mail messages, one to be sent to the Call Center analyst and the other to the Taxonomy analyst.
 - a. The Call Center checks that no audit products and accessible text are missing; and checks that all the links are functioning properly.
 - b. The Taxonomy analyst verifies that the products are assigned to the appropriate categories.
- 4. Input the following in the e-mail message for the Call Center:
- 5. Recipients:
- 6. To: CallCenter; Call Center team members
- 7. Cc: Information Management team members; WebOps Team Manager
- 8. Subject: Month-in-Review: Month yyyy"
- 9. Example Subject line: Draft: Month-in-Review: January 2007.
- 10. Body:

The Draft March 2011 GAO Month-in-Review (below) is ready for the click-throughs. (The Press Top 10 has not been updated yet, so the link below points to Press Top 10 for which ever month is two months previous to the current date.) Please also check to make sure that every audit product issued during the Month of March is included in this list. If you have a question, please let me know.

Please reply to me and WebOps when it has been checked.

11. Once the content and subject of the listserv e-mail has been captured, delete the listserv confirmation request.

6.2.2 GAO Draft Review Process

After the IMPD review, send the MIR list to Public Affairs POCs for GAO review.

- 1. Generate the listserv message by logging in to the WCM by going to the Intranet Admin page: https://intranet.gao.gov/admin/login; selecting the "Manage WWW Topic Emails" in the "Manage WWW Menu," and selecting the "Send MIR Email."
- 2. This will generate the MIR and send it to the MIR listserv. The listserv will send a confirmation request to webmaster with the MIR e-mail attached to it. Do not confirm request.
- 3. Open the attached e-mail, which is the MIR list.
- 4. Input the following into the e-mail message from the attached e-mail:
 - a. Recipient: Contacts in Public Affairs including Managing Director
 - b. Subject line: Use the MIR e-mail's subject line with "Draft:" added to the front.
 - c. Body:

Please review and approve this month's EMIR. Please reply to all.

Thank you.

If changes need to be made, open a new email as "Webmaster." Revise the Month-in-Review message according to the instructions received by GAO.

Remove the footer in the message to prevent there being a duplicate footer in the message sent by the listserv.

The footer includes everything below the last product. The listserv will add the footer to the message. The footer is copied below:

If you have any questions, please contact Chuck Young of Public Affairs at (202) 512-4800 or via email at YoungCl@GAO.GOV.

Subscribe to this monthly mailing and daily E-mail updates about GAO products at the "E-mail Updates" section of http://www.gao.gov.

Remove yourself from this mailing list by sending an E-mail message to: listserv@listserv.gao.gov with the message:

unsubscribe review-m in the message body.

Find these and other GAO products in the "Reports and Testimonies"

section or the "Legal Decisions" section of http://www.gao.gov.

Information on ordering printed copies at:

http://www.gao.gov/ordering.htm

This list is produced by the Government Accountability Office.

- 5. Delete the request for confirmation.
- 6. Paste the revised month-in-review message in the body of the e-mail.
- Subject: GAO Month-in-Review: Month yyyy
- 8. Example: GAO Month-in-Review: September 2008
- 9. Recipient: m-review@listserv.gao.gov

- 10. Send the e-mail.
- 11. The listserv will send a confirmation request with the revised Month-in-Review message attached.
- 12. Open the attachment to make sure that it is the document you mean to send and looks correctly formatted. Close it.
- Reply to the listserv confirmation request Type "ok" (without the quotes) in body of the email, and send the e-mail.

Note: Never respond to the listserv on draft month-in-review listservs. All draft month-in-review listservs should be deleted to prevent someone from inadvertently authorizing the email to be sent out to the world.

6.2.3 Month-in-Review Web Pages

The Month-in-Review web pages are generated through the framework from the database, so the page is not created manually.

- 1. Send a copy of the listserv message to whomever does the QA check of the Month-in-Review web page.
- 2. Ask the person to compare the order of the items in the listserv message to the order of the items on the Month-in-Review web page, which can be found at http://www.gao.gov/mir/yyyy/month (example: http://www.gao.gov/mir/2011/june).
- 3. If the order is not the same, work with a programmer familiar with the framework to resolve the differences.
- 4. Once any issues with the page have been resolved, send an e-mail to the WSG person responsible for the external website, with a message explaining that the page is ready for review.
- 5. Once WSG approves the page, add a link for the month to http://www.gao.gov/mir.html (/opt/data/www/apache/htdocs/mir.html on Inxpro20), http://www-dev.gao.gov/mir.html (/opt/data/www-dev/apache/htdocs/mir.html), http://watchdog.gao.gov/review.html (/opt/data/localhost/apache/htdocs/watchdog/review.html on watchdog), and http://watchdog2.gao.gov/review.html (/opt/data/watchdog/apache/htdocs/review.html on watchdog2). Use the formatting used for the other months listed. (At some point, watchdog2 will replace watchdog, and, once that happens, it may be that pages on only three servers have to be updated.)
- 6. Update the "Most Recent Month-in-Review" link under "Key References" on the Home page to link to the most recent Month-in-Review.

6.3 Active Assignments

Note: Refer to Appendix E, section 1.5 for a description on GAO Active Assignments interface.

Updating Active Assignments requires access to Inxdev20?, Inxweb1, Inxdev1, and watchdog (ssh).

Note: In the commands listed below, case matters—for example: upper case "S" may not be replaced by lower case "s".

On the 14th of each month (or on the first week day after the 14th, if the 14th falls on a weekend), proxy to WebOps mailbox.

1. Find recent e-mails from EOSC. One of these e-mails will contain an attachment named "JISTAB1." Save the JISTAB1 attachment from the most recent e-mail that includes the JISTAB1 attachment.

Scp jistabl to /opt/data/watchdog-stage on lnxwebl.

2. Open ssh session to Inxweb1. Type the commands listed below.

Cd /opt/data/watchdog-stage

3. cp jistab1 /home/singhald/aasn/data/jistab.txt If you run into problems, contact a WebOps programmer about the permissions setting and how to successfully perform this copy operation.

Cd /home/singhald/aasn/

./run_activeasn

- a. (The following output messages that appear do not indicate a problem.)
 - i. Message appears: c: preserving times for data/jobsnap.dbf operation not permitted
 - ii. Message appears: c: preserving times for data/jobsnap.fpt operation not permitted
- 4. Review the output generated from running the script. Make sure that the date displayed in the output is close to the date indicated in the message in the e-mail that transmitted the JISTAB1 attachment used to perform the current update. This is usually the business day immediately preceding the 14th.
 - a. You will be prompted to continue. To continue rather than quit, type "Y" or "y" (without the quotes). Any other entry will end the process.
- 5. When message "Continue or abort?" (y to continue) appears, enter lower-case y.
 - a. The last line of output will be "Process Run: *nnnnn*" (where "*nnnnn*" stands for a number, that will be different each time). **Record the process run number**.
- 6. Transfer file activeasn.after. nnnnn.sql from lnxweb1 to lnxdev1 by typing

```
scp activeasn.after. nnnnn.sql lnxdev1:.
```

- 7. The command will put the file in your home directory on Inxdev1.
 - * nnnnn is the number from the Process Run line. IT WILL CHANGE ON EVERY RUN.

Ssh to Inxdev1 by typing

ssh lnxdev1

8. Then type

```
mysql -u activeasn -p activeasn -S
/opt/data/lnxdev4/mysql/mysql.sock < activeasn.after.nnnnn.sql</pre>
```

- a. You will be prompted to enter the activeasn MySQL password. (Enter it!)
- 9. Log out.
- 10. Visit http://watchdog-tst.gao.gov/activeasn/ and check the active assignments according to instructions in the paragraph below under "Checking the List of Active Assignments."
- 11. If the data and date displayed are appropriate, update active assignments on watchdog.
- 12. Transfer the activeasn.after.nnnnn.sql to your home directory on watchdog.

```
Scp activeasn.after.nnnnn.sql watchdog:.
Ssh to your home directory on watchdog by typing
ssh watchdog
```

13. Type

```
mysql -u activeasn -p activeasn -S
/opt/data/localhost/mysql/run/mysql.sock <
activeasn.after.nnnnn.sql</pre>
```

- a. You will be prompted to enter the activeasn MySQL password. (Enter it!)
- b. Note: Running run_activeasn dumps the database to /home/singhald/aasn before beginning the update. If it becomes necessary to restore the database, use the database dump. It will be named according to the convention reflected in activeasn.backup.nnnnn.sql, where the numbered part needs to match the number output as a result of running run_activeasn (the number that you were instructed to record). The database is dumped again after the update and stored in activeasn.after. nnnnn.sql, where the numbered part needs to match the process number that was output by running run_activeasn.
- c. The Restore command is

```
mysql activeasn -u activeasn -p < activeasn.backup.nnnnn.sql
```

where the numbered part needs to match the number process number that was output by running run_activeasn (the number that you were instructed to record earlier).

Checking the List of Active Assignments

- 14. Check the List of Active Assignments on watchdog.gao.gov by linking to the items listed under http://watchdog.gao.gov/activeasn/welcome.php and examining the contents. The number of Total Active Assignments on December 2005 was 579. Number of new assignment was 60. Look at these numbers after updating the site. The numbers should probably be close in size to these.
- 15. Once the site has been successfully updated, notify WSG External website Contact, WebOps, Web Operations Support Managers, the IMPD web programmer, and TPOC on Active Assignments-related correspondence. The active assignments contact is Mario Petrucelli, but the WebOps team does not notify him directly that the list has been updated.

6.4 Listserv Reports

On the 5th of each month, send a report that provides the number of subscribers associated with each of the specified listserv mailing lists via e-mail.

- 1. Generate the numbers of subscribers by doing the following steps:
 - Go to listserv.gao.gov.
 - User is webmaster@gao.gov; Password is bansh33.
 - Click on Mailing list management interface (list owners only).
 - "List Management" page is the web page by which the Webmaster normally adds and removes subscriptions.
 - Choose "List Management" from the top left side of the page.
 - Go to List Reports > List Reports.
 - Select "Subscribers" only, and click "Submit."
 - o This will generate the most current number of subscribers of each GAO mailing list.
- 2. Update the numbers of subscribers in the List's Word document.

Note: Do not include the following lists in the e-mail report:

```
fasab
gao-npi
intosai-journal
```

intosaijournal-en it-human-capital wsg-test

Below is a sample table:

Table 6-1 Sample Table

List	No. of
LIST	Subscribers
daybook	22242
decisions	13440
agriculture-s	3359
Arra-s	
budgetspend-s	9094
busicon-s	5337
civilrights-s	3842
econdev-s	4535
education-s	4110
employment-s	3816
energy-s	3670
envprot-s	3699
fininst-s	3303
finmgmt-s	5067
govops-s	7127
health-s	6349
homelandsec-s	6755
housing-s	2594
ig	
incomesec-s	2646
infomgmt-s	4658
intaffairs-s	3786
justicelaw-s	4660
mgmtnews	779
natldef-s	6269
natresources-s	2904
scitech-s	5365
review-m	17778
socserv-s	3923
specpub-s	4624
tarp-s	
taxpolicy-s	4292
transportation-s	3362
vetaffairs-s	4009

3. Send the e-mail with the following items:

- Recipients:
 - o Knowledge Services, Director, Web Content and Electronic Media
 - Web Services Group External website Contact
 - Search Engine Contact and Web Services Group External website Alternate Contact
 - o GAO Technical Point of Contact

- o GAO IMPD Deputy Program Manager
- WebOps Team Lead
- WebOps mailbox
- Subject: Listserv Counts *month year*.
 - o Note: *month* is the previous month.
- Body:
 - o Attach the List Word document from Step #2.

Section 7 Annual Tasks

7.1 Bid Protest Annual Report

A "Bid Protest Annual Report" is posted once a year. Because the product number assigned to a "Bid Protest Annual Report" has the same format as a filename for a correspondence, an exception was inserted into the code (at the end of 2008) to generate the "Recently Issued Products" section of the home page and force the "Bid Protest Annual Report" to be listed under the "Legal Products tab" rather than the "Reports & Testimonies" tab.

The following instructions for posting the "Bid Protest Annual Report" are based on an e-mail sent by Sharon Dooley on December 30, 2008.

At this point, WebOps is notified to post the product through a request from GC. Before WebOps posts the PDF, the Information Management or Distribution team is supposed to process/optimize the PDF and ensure that valid entries are in the PDF document properties. (As of late 2008, KS was working with GC to create a routine process for posting these products, but the process had not been finalized.)

If under the PDF Document Properties the metadata is inaccurate or unavailable, WebOps will need to manually enter the title and author metadata. The metadata found in the "Bid Protest Annual Report to the Congress for Fiscal Year 2008" is provided below as a sample:

Title would be: GAO-09-251R GAO Bid Protest Annual Report to the Congress for Fiscal Year 2008

Author: U.S. Government Accountability Office, http://www.gao.gov

Current location and file-naming convention (e.g., Fiscal Year 2008): http://www.gao.gov/special.pubs/bidpro08.pdf

Follow example of prior year postings for link label on the Bid Protests Annual Report page at http://www.gao.gov/decisions/bidproan.htm. A sample listing from 2008 is provided below:

GAO Bid Protest Annual Report to the Congress for Fiscal Year 2008 2008-12-22 Full Report (PDF, 2 pages)

Section 8 Maintenance

8.1 Listsery List Maintenance

Occasionally it is necessary to change the boilerplate on listserv messages. For example, the Public Affairs POC may change, and the Public Affairs POC is on the Month-in-Review boilerplate. For some lists the part or all of the boilerplate is added by a script, and for other lists part or all of the boilerplate is contained in a listserv template. The Month-in-Review boilerplate is a listserv template, the "*Bottom banner for plain text postings [BOTTOM_BANNER]" template.

To edit a template, perform the following steps:

- 1. Open the listserv management page at http://listserv.gao.gov/.
 - Select "Mailing List Management Interface" if the interface page is not the first page you see.
- 2. Select "List Management | Customization | Mail Templates"
- 3. In the "Select Template Category:" drop-down, select "All Templates".
- 4. Select the appropriate template.
 - a. The appropriate template for the specific list is provided in the pertinent subsection below. In most cases it is the "*Bottom banner for plain text postings [BOTTOM_BANNER]" template.
- 5. Click the "Edit Template" button.
- 6. Make the appropriate edit.
- 7. Click on the "Update" button.

8.1.1 Sending an INTOSAI Journal Listserv Message

If a request to send a message to the INTOSAI list is received, keep in mind that, unless something changes between now (March 8, 2008) and the next request, this e-mail needs to be sent to the listserv from the IntosaiJournal (IntosaiJournal@gao.gov) GroupWise account, not from Webmaster account. Consult WSG to find someone with access to the IntosaiJournal account to send the e-mail to the listserv. On March 3, 2008, the request for confirmation was filtered to the "approval required" folder of the Webmaster mailbox (which contains many requests for confirmation of SPAM e-mails). Be careful to read the attached message to make sure that it is appropriate before approving the request. At this point in time (March 3, 2008), IMPD does not know of any other legitimate requests for approval that are filtered to the "approval required" folder.

8.1.2 Daybook

The part of the boiler plate copied between the next two lines below is added by daybookv5.pl on data on hqsp2 server in isc\projects\isc\gaoreps\daybook.

Help with viewing PDF files is available from the "Help" section of http://www.gao.gov.

Check the information in the section titled, "Help with Reading Portable Document Format Files" if you have difficulty.

Subscribe to this or other E-mail updates about GAO products at the "E-mail Updates" section of http://www.gao.gov.

Remove yourself from this mailing list by sending an E-mail message to: <u>listserv@listserv.gao.gov</u> with the message: unsubscribe daybook in the message body.

Information on ordering printed copies at:

http://www.gao.gov/ordering.htm

Members of the press may request copies from the Office of Public Affairs, 202-512-4800.

The rest of the boilerplate (shown below) is in the "*Bottom banner for plain text postings [BOTTOM_BANNER]" template of the daybook list.

This list is produced by the Government Accountability Office to provide daily information about GAO Reports and Testimonies. Visit GAO on the web at http://www.gao.gov

8.1.3 Topic Lists

The part copied between the next two lines below is in

/opt/data/impd/apache/htdocs/ihsf/subscription/send.php on Inxpro2a. WebOps does not have access to the file. Changes to it have to be made by the Software Development Team.

These and other GAO products are available from the "Reports and Testimonies" section of GAO's Internet site, http://www.gao.gov.

Help with viewing PDF files is available from the "Help" section of http://www.gao.gov. Check the information in the section titled, "Help with Reading Portable Document Format Files" if you have difficulty.

Subscribe to this or other E-mail updates about GAO products at the "E-mail Updates" section of http://www.gao.gov.

Remove yourself from this mailing list by sending an E-mail message to: listserv@listserv.gao.gov with the message: unsubscribe natldef-s in the message body.

Order printed copies of any of these items from GAO: 202-512-6000 (voice) 202-512-2537 (TDD) 202-512-6061 (fax).

Members of the press may request copies from the Office of Public Affairs, 202-512-4800.

The bottom part (between the next two lines below) is in the "*Bottom banner for plain text postings [BOTTOM_BANNER]" template of a list template.

This list is produced by the Government Accountability Office to provide timely information about GAO Reports and Testimonies related to National Defense. You may visit GAO on the web at http://www.gao.gov

8.1.4 Month-in-Review

The Month-in-Review boilerplate is a listserv template. It is the "*Bottom banner for plain text postings [BOTTOM_BANNER]" template of review-m list. To edit the template, perform steps 1-7 listed near the beginning of this section.

8.2 Web Page Maintenance

This section lists the general tasks that are performed by WebOps staff in maintaining and enhancing web pages.

8.3 Daily

Review Production PHP error logs delivered by the ISTS NOG to identify, analyze and propose rectification for production errors.

8.4 General

- As requested by WSG via a DR or PCI, provide MySQL/PHP/PERL maintenance and new development support of internal websites.
- As requested by WSG via a DR or PCI, provide MySQL/PHP/PERL maintenance and new development support of external websites.
- Provide expert guidance and/or execute requested maintenance/new development for MySQL/SQL concerns and optimization of database interactions as determined by thorough analysis of current processes and requirements.

8.4.1 Urgent Requirement to Remove Product

If a request is made to remove a file immediately, remove the file as quickly as possible. Then log in to web_doc at https://impd.gao.gov/ihsf/highlights/filldfrm.php. Find the Web_doc record for the product. If only a subsidiary file has to be removed, remove the location of the subsidiary product (text URL or highlights URL, for example). Once the cron job that updates docdb-lite runs (at 5, 25, and 45 minutes after the hour), the link to the subsidiary product should no longer appear. It may be necessary to add "?no_cache=1" (without the quotes) to the URL to get an uncached search result. Once the links in question are removed, create a new search engine entry for the main product.

If the full product has to be removed, follow the steps above. The Information Management team will also need to delete the record for the product so that a search result is not returned for the product.

8.4.2 Saving Previous Versions of Files

Whenever you change a Web file, first make a copy (backup) of the file. The filename of the backup needs to include the filename, server on which it resided, and date that reflects the timestamp that was on the file before you made the change to the original. Do not copy the backup to the production server. In the same way, make a backup copy of the version of the corresponding file on www-dev. Copy both backup files in the location of the original file on the development server (www-dev in September 2008) that corresponds to the location of the original file on production. Delete previous backups of the files except for those belonging to WSG staff, so that only the most recent backups of the production and development versions remain.

Section 9 Updating

9.1 Yellow Book Pages

GAO Auditing Standards group infrequently requests special postings of new files. The request will come in an e-mail with the attached files to be posted. These are changes to static HTML pages.

Note: Always save copies of existing version before transferring new files to the server.

HTML files

- 1. Copy the existing HTML file from the website server location to your local hard drive.
- 2. Replace the content between the footers in the existing file with the content of the file transmitted in the request e-mail.
 - a. Note: The code at the beginning and the end of the transmitted HTML file will not be used; it is the code generated by the header and footer PHP code.
 - b. Sometimes, the requester sends HTML files that are placed on the Web for selected viewers to whom he sends the URL. These files do not have GAO header/footer code and can be copied as is to the appropriate location. In such a case, he usually provides a note similar to the one below:
 - i. Note: These updates are to the special, nonpublic Yellow Book Advisory Council Members page. There are no links to the main Yellow Book http://www.gao.gov/govaud/ybk01.htm.
- Copy the revised (or new) HTML files to the appropriate directory on Inxdev20.
- 4. Test the links.
- 5. Transfer the HTML files to the appropriate location under www on Inxpro. The files are usually being placed in the /opt/data/www/apache/htdocs/govaud directory.

PDF files

- 1. Copy the PDF files attached in the request e-mail to Inxpro20 and to Inxdev20.
 - a. If a document to be posted has a report number, the document probably has to be posted to new.items.
 - i. In such a case, let the requester know that (1) the link in the web pages to the document will be links to the document in the new.items location; and that (2) the document should not be placed in the govaud directory at http://www.gao.gov/govaud/.
 - b. If there is some question as to whether this applies to a particular document, contact the Web Services Group External website Contact.
- 2. Check of the links on public site.
- 3. Reply back to the requester indicating that the files have been posted, copying Web Services PCO, GAO TPOC, and Information Management Tier 2 Manager.

9.2 Topic Lists

9.2.1 Change Topic List Criteria

- 9.2.1.1 Updating the title or description of a topic collection
 - 1. On a development server first ssh to the server.
 - 2. Open a MySQL prompt (the bold part is the database for the server).

```
Mysql -u docdblite -p -S /opt/data/www-dev/mysql/mysql.sock docdblite
```

3. List the current names and ids of topic collections

```
SELECT * FROM t_collection\G
```

- 4. Write down the id of the item you wish to update.
- 5. Create and issue your update statement using your collection_id

```
UPDATE t_collection SET collection_name = 'The new title' WHERE
collection id = 23;
```

UPDATE t_collection SET top_content = 'The new description' WHERE
collection_id = 23;

6. If either title or description include an apostrophe, put a single backslash before it...

```
UPDATE t_collection SET collection_name = 'The new title isn\'t' WHERE
collection_id = 23;
```

- 7. Verify your changes on the website (assuming memory caching is in use)
- 8. View http://www-dev.gao.gov/docsearch/featured/index.html?no_cache=1
- 9. Deploy your change immediately by accessing the below site:

http://www-dev.gao.gov/docsearch/featured/index.html?kill_cache=1

a. Note: If you do not do this step your change will be made within 20 minutes, but may be made instantly after the database update statement is issued, depending on the state of memory cache.

9.2.1.2 Changing the results listed underneath a topic collection

- 1. Ask a developer whether to CD (change directory) to /home/webmaster/bin/gao_framework or to /home/webmaster/dev/bin/gao_framework.
- 2. Edit the file: topicCollUpdate.sql. Ask a developer whether the subversion repository copy of topicCollUpdate.sql needs to be updated.
- 3. Locate the SQL block that creates the topic collection you wish to change.
- 4. Add the new parameters to the query.
 - a. This will depend on what you need to add, copy the existing syntax where possible.
- 5. To see your changes, run ./refresh_framework.sh.
- 6. Verify the changes on dev.
- 7. Copy the changed SQL file to the target server, re-run the refresh framework.sh script.

9.2.2 Refreshing Topic Lists

Topic web pages other than ARRA and TARP are updated by running ./latest.sh. The page at the "Topic Collections" tab (http://www.gao.gov/docsearch/featured/index.html) has to be refreshed by applying with ?no_cache=1 and then ?kill_cache=1 to the end of the URL. The date associated with a topic on the "Topic Collections" page must agree with the date of the most recent product listed on the linked individual topic page. Refresh the linked pages by applying ?no_cache=1 and then ?kill_cache=1.

In order for the TARP and ARRA (Recovery Act) collections to update, the topic_searches.php script must run on dev20. (The e-mail updates for ARRA and TARP also depend on running the topic_searches.php script on dev20.)

NOTE: Recovery Act and TARP products will not be included in the associated topic lists or topic e-mails generated until their database records have been fully loaded. If it is clear that there is a Recovery Act product or a TARP product, it makes sense not to run the lnxdev20 topic_searches.php until the Recovery Act and TARP products records have been fully loaded. To run the lnxdev20 script

```
cd /opt/home/singhald/svn/topic_searches
/opt/php-5.2.6/bin/php topic searches.php
```

After that, TARP is on

http://www.gao.gov/docsearch/featured/financialmarketsandhousing.html

and ARRA is at:

http://www.gao.gov/docsearch/featured/recovery_act

In order to make sure you're viewing the latest versions of the page, don't forget to no_cache and kill cache.

New functions provide an override for any generated or feed list to always include something that is not appearing in the feed. To update from the feed, just re-run the topic_searches function on dev20.

9.3 "Welcome to GAO" Box

GAO staff will makes this change in most cases. These are the directions to change out the message in the Welcome box on gao.gov:

File: welcome.html [located: opt/data/www/apache/htdocs/]

Uncomment the weather class information; or, if it is not there, add the following and add or delete
br/> tags to adjust spacing:

```
<div class="weather">
  <center><br /><h1>February 5, 2010: GAO Headquarters is closed
today due to inclement weather.</h1><br /><br /><br />
  </center>
  </div>
Additional info:
```

The weather class has been added to welcome.css located: /opt/data/www/apache/htdocs/inc/css and the background image weather.gif was added: /opt/data/www/apache/htdocs/inc/gr

9.4 Mobile Website

GAO has a mobile website that is accessible to all mobile devices. Currently the site includes Reports and testimonies, Legal Decisions, and the "In the Spotlight" section of www.gao.gov.

The Reports and testimonies and legal Decisions are updated automatically. When items, usually press releases, are added to the Spotlight, these need to be manually To add an item to the Spotlight:

- 1. The file to modify is on Inxpro20 at /opt/data/apache/htdocs-framework/modules/mobile/info/spotlight.php.
- 2. The title should match what is on WWW unless otherwise specified.

As of July 2011, videos and podcasts are now available on the mobile site, and viewable on mobile devices and tablets. These will be added to site automatically when new videos or podcasts are added to the multimedia gallery.

Section 10 508 Compliance

10.1 Verification of 508 Compliance Process

All web-based and telecommunications products representing GAO will be periodically validated against agreed upon 508 compliance levels.

10.2 System Based Content

Content that is derived or published from a content management system will be validated on a system level before or when the system comes online. The goal is to validated that all content flowing through said system will be compliant.

This method of testing applies to the template content. Where a header or footer or other consistent page elements are shared across multiple pages, a sampling of pages shall be tested until the repeated consistent page elements are valid. It is not necessary to validate every individual page that shares the same content.

Where content internal to a template may be unusual or involved then that page should be specifically tested

10.3 Manually Created Content

All content that is created manually in an ad hoc manner should be reviewed for 508 compliance before it is deployed.

10.4 Method of Validation

Content should be validated using an available online validation tool such as: http://achecker.ca/checker/index.php.

For an additional test, a screen reader can be used to validate that page content is appropriately read.

Guidelines listed at: http://www.access-board.gov/508.htm shall be followed. If the guidelines are updated, content should be rescanned for additional compliance requirements. Specifications to be followed are listed: http://www.access-board.gov/sec508/standards.htm.

Where content is provided in alternative formats (accessible text file versions of products, captions for videos or transcripts for podcasts) the presence of these files should be validated by the controlling system, the level of compliance should be reportable from whatever storage system maintains the alternative content.

10.5 Level of Compliance

There are many levels of compliance. In the achecker.ca tool, 508 compliance should be selected from the options menu before running. GAO and the contract staff shall agree upon a level of compliance and any exceptions to standards should be listed.

Section 11 E-Reports

E-Reports are generated from XML-formatted Word source files of GAO audit products. The Product Assistance Groups (PAGs) upload a product's Word source file to the Product Metadata Repository (PMR), the web-based database and distribution system for GAO products. Once the other components of the PMR record are completed, the product is sent through the WWW distribution channel. The E-Report will then be available on the public website along with its component supporting files and the product's PDF and accessible TXT versions.

The instructions below outline the entire audit product processing with the E-Report procedures (Step 5).

Step 1: Initial Receipt

- Mission Team drop Word source file of the GAO product into Teams folder on U:\Work in Process\Teams folder.
 - Files to be dropped:
 - Main report document
 - Highlights document
 - Title document
 - o Graphics

Step 2: File Formatting

- 1. PAG applies GAO blank template to Word source file.
 - The template formats the document to the GAO standard (i.e., removes section breaks, etc.)
- 2. PAG copies text from the formatted version and paste it into a GAO_Reports_Template file.
- 3. PAG saves the GAO_Reports_Template file into the PAG folder on the U-drive.
- 4. In the Word file, PAG tags text (body text, headers, tables, figure captions) with GAO-specific Word styles.
- 5. In the Word file, PAG inserts figures and tables.
 - Graphics are sent prior to report.
 - Graphics are located in Graphics folder.
 - A placeholder (flat graphic; shell) is inserted for interactive graphics.
- 6. Once fully formatted with all components inputted, PAG sends formatted Word file back to the Mission Team for review.

Step 3: QA

- Mission Team reviews reformatted Word file, and sends any changes to the PAG.
- PAG makes any changes to the Word source file and coverts it into a PDF file.
- 3. PAG sends the PDF to Mission Team and KS QA for final review.
- 4. Mission Team reviews the final PDF file.
- 5. KS QA reviews the final PDF file.
 - QA process covers looking over product to see if styles are properly applied, URL links work, all the content is embedded, etc.

Step 4: Internal Release

1. PAG makes any final changes to the PDF file and uploads it to the U:\Web Posting folder.

Step 5: E-Report Generation

- 1. PAG uploads the formatted Word source file of the product and its component figures into PMR.
 - Uploading the Word source file automatically generates a Publication record in PMR.
- 2. KS QA reviews the PMR-generated content, and makes any needed changes.
- 3. Upon completion, KS QA notifies IM via e-mail.
- 4. IM completes the remainder of the PMR Publication record, adding metadata, component files (accessible text, Highlights, the final PDF version, etc.), and assigning Taxonomy data.
- Upon completion and approval of the record, IM will then publish the Publication record to WWW [dev].
- 6. IM notifies WSG/KS.
- 7. WSG/KS e-mails URL to the appropriate congressional contacts, and then notifies IM to post product.

Step 6: External Release

1. IM publishes the Publication record to WWW [prod].

Appendix A: Scripts

1.1 Cron Jobs

- 1. Docket: An export of data from GCTrack is used to populate/update the Bid protest Docket on www.gao.gov.
- 2. Fed Rules: An export of data from the Federal Rules database is used to populate/update the Federal Rules Search on the public website.
- 3. Feedback Expiring (Comments): Used to end the comment process, most likely for orders.

1.2 Scripts

Table A-1 List of Scripts

Script Name	Туре	Description	Location	
archive_feedback	pl	archive_feedback This program archives and distributes comments received via the feedback application. For details, see Appendix E, 1.4.6: Archiving Comments.	Lnxpro2 (which may mean that it will move to Inxpro2a) /opt/usr/local/bin	
Daybook cleanup	pl	Batch script used to archive PDF files updated with the new metadata.	X:\ISC\projects\isc\gaoreps\DAYBOOK	
5		Prepares SQL file for	LNXPRO20	
Docket.sh	sh	loading into the database for the protest docket	/home/webmaster/infomgt/protest/docket.sh	
Execvac.sh	sh	Prepares SQL file for	LNXPRO2	
		loading into the database for executive vacancies	/opt/home/webmaster/morning/out/execvac.sh	
Html_templates.pl	pl	The script html_templates.pl. generates the introductory text.	on Inxpro20 under /home/webmaster/scripts	
		Load fedrules, bid protest	LNXPRO20	
Morning.sh	sh	docket and executive vacancies into database	/home/webmaster/scripts/morning/morning.sh	
Redo.pg	pg	Lists dates on an HTML page allowing you to choose a day and see the documents released that day.	LNXPRO20 /home/webmaster/redo.pg	
Reindex.pl	pl	generates the entries on the index pages, and generates the e-mail message(s) to WebOps	LNXPRO20 /home/webmaster/scripts/reindex	
Uncat		Extract files	System resource on all Linux servers	

Script Name	Туре	Description	Location	
Webstats		Create new stats log analysis files based upon the date parameters supplied to the script	LNXPRO2 /home/stats/stats.sh <username> end.YYYYMMDD YYYYMMDD</username>	
Winscp		Use winscp to copy the HTML file to your personal share on Inxpro20 (WWW)	Windows Application	
Year_fr.pl	pl	This grabs all the reports numbers and links for the reports, inserts HTML links for the report numbers and formats them into paragraphs.		
archive_feedback	pl	archive_feedback This program archives and distributes comments received via the feedback application. For details, see Appendix E, 1.4.6: Archiving Comments.	Lnxpro2 (which may mean that it will move to Inxpro2a) /opt/usr/local/bin	
Daybook cleanup	pl	Batch script used to archive PDF files updated with the new metadata.	X:\ISC\projects\isc\gaoreps\DAYBOOK	
Docket.sh	sh	Prepares SQL file for loading into the database for the protest docket	LNXPRO20 /home/webmaster/infomgt/protest/docket.sh	
Execvac.sh	sh	Prepares SQL file for loading into the database for executive vacancies	LNXPRO2 /opt/home/webmaster/morning/out/execvac.sh	
Html_templates.pl	pl	The script html_templates.pl. generates the introductory text.	on Inxpro20 under /home/webmaster/scripts	

Appendix B: GAO Contacts

1.1 GAO Contacts

The table below lists the various contacts and subject matter experts cited in the text.

Table B-1 GAO Contacts

Name	Title	Department
Messina, Stephanie	Information Management Team Manager	GAO IMPD
Bingham, Zenobia	Technical Point of Contact	GAO ISTS
Feeney, Marybeth	Document Analyst	GAO IMPD
Dooley, Sharon W.	Director, Web Content and Electronic Media	GAO KS
Griffith, Fuller (Ned)	Public Affairs Specialist	GAO PA
Dale, Colin	Web Development Lead	GAO IMPD
Taylor, Charlotte	WSG External website Contact; GAO Webmaster; and Alternate Search Engine Contact	GAO ISTS
Ashley, Jennifer	Public Affairs Specialist	GAO PA
Pattie, Carol M.	Management Analyst	GAO KS
Petrucelli, Mario	Management Information Analyst	GAO QCI
Trevino, Juan	GAO ITSC	GAO ISTS
Tuceling, William	Reference Librarian	GAO KS

Appendix C: System Tools and Access for Web Operations

Performing WebOps procedures requires the following Web Access accounts and computer applications:

1.1 Web Access Accounts

- A static IP address
- Belonging to web and wanabe groups on Inxpro20, archive, Inxdev20, and Inxpro2 and having an account on watchdog.
- Access to Inxpro5 and membership in its web group.
- Access to Inxdev1 and membership in its dev_lm and web groups.
- Oracle account
- Accounts for the following Web applications:
 - http://impd.gao.gov/ihsf/monthinreview/index.php
 - o https://survey.gao.gov/perm/pbprptno/index.htm
 - o http://searching.gao.gov/admin/index.html
- For access to no. 1 above, send an e-mail to the helpme account requesting the access, and provide in the e-mail this information: cn=User,ou=EMIR,ou=Applications,ou=Security,o=GAO
- For access to no. 2 above, contact the GAO staff member in charge of Web surveys.

1.2 Applications

- SQL*Plus (used for running scripts for GPO text; now used for Oracle password changes.)
- PDFUpdate1.2
- Dreamweaver
- Homesite
- WinSCP for secure FTP
- Putty for telnet
- Pageant for loading keys
- Versioning software (TortoiseSVN at http://tortoisesvn.net/downloads)
- Pageant keys
- Proxy access to GAO Webmaster, WebOps e-mail accounts

1.3 Folders

Access to the following folders:

- V1 on Info server
- Data on Gaohsqp2 server
 - \isc\projects\isc\gaoreps\daybook
- Publishing on GAOpub1\Publish server
 - o For_Printing
 - Web Posting

Appendix D: Historical Processes

1.1 Earlybird News

DOD e-mails GAO issues of Earlybird News (usually every day with the exception of holidays). The WebOps team posts the issue on a GAO internal site. Instructions for retrieving and posting the Earlybird News are discussed below.

Post Early Bird by 8:00 a.m. at the latest.

- 1. Look in the WebOps mailbox for the e-mail transmitting the Earlybird file.
- 2. Note: The e-mail will have "Earlybird" or "EB" in the subject. The person that normally posts Earlybird is on the Surveys team and does not have access to the WebOps mailbox. A rule has been created in the WebOps account to forward the e-mail to the individual WebOps staff person's account. If the e-mail is forwarded to your account, look in your own e-mail account for the e-mail transmitting the Earlybird file.
- 3. Search for and open the Earlybird e-mail for the appropriate date, and open the attachment.
- 4. Right-click to view source.
- Copy all of the source code.
- 6. Log in to the Intranet admin page at https://intranet.gao.gov/admin/login.
- 7. On the left, "Main Menu" is displayed followed by a list. In the list, find "Earlybird." If you do not see "Main Menu," select "dashboard" in the right upper corner of the page to view "Main Menu" list. (If "Earlybird" is not visible, you have not yet been authorized to post Earlybird.)
- 8. Select "Earlybird."
- 9. From the left side of the page, select "Start a new issue."
- 10. Paste the source code into the text area, and select "Process Text."
- 11. From the left side of the page, select "Find an Issue." Select preview (to the right) for the issue you created. Test several of the links to verify that each opens an article. (Use the "Back" button to return to the list of articles. If the articles open, return to the dashboard (upper right corner).
- 12. Select "Earlybird."
- 13. The image under status will show a red light. Click on the symbol to publish the issue. The image will display a green light.
- 14. Log out.
- 15. Normally there is an issue for every day of the week, which means that, on Monday, there are three issues (Saturday, Sunday, and Monday).
- 16. Note: If there is no e-mail for a date (other than a holiday), contact Reference Librarian at tucelingw@gao.gov.
- 17. Normally there is no issue for a holiday.
- 18. If no issue is received, instead of selecting "Start a new issue" in the steps above, select "Enter a No-Early Bird." modify the index.html to reflect that. Add an entry for the date. Next to the date, include whichever message below is appropriate.
- 19. "Earlybird issue is not available at this time. Please try again later."
- 20. "No Earlybird issued today."
- 21. "Holiday--no Earlybird issued."

If you cannot reach the Reference Librarian and there is no e-mail, call 703 614-1889 identifying yourself and stating that GAO did not receive the Early Bird News issue. The person that sends the e-mail is on a night shift and leaves in the morning. A person that sits nearby but does not handle Earlybird can be reached at 703 697-1672.

Other contact information for the Reference Librarian is below.

Reference Librarian
US Government Accountability Office Technical Library
441 G St., NW; Room 7N14A
Washington, DC 20548
(202) 512-5025 (phone)
(202) 512-3373 (fax)
tuceling@gao.gov (work)
tuceling@erols.com (home)

1.2 Foresee Survey

GAO runs a Foresee survey on its external Web site. The GAO Webmaster sends a Word document with a table containing comments received in response to the survey. The table includes date, e-mail address, and comment columns. Instructions for handling the comments are provided below.

1.2.1 Types of Survey Feedback

There are two types of survey feedback:

- Case 1: Any positive comment provided (e.g., compliments or thanks). No question is asked, and no suggestion is made.
- Case 2: One or both comments raise an issue, topic, or concern. Each comment is addressed separately.

1.2.2 Handling Case 1

Respond (from the Webmaster account) to comments that fall into the first category by sending the following message:

Recipients:

To: User commenter.

BCC: TPOC

Subject: U.S. GAO Foresee Survey Comment Received on [date provided]

(Where "[date]" stands for the date, the user completed the survey).

Body:

This message is in response to a comment you entered in the customer satisfaction survey running on GAO's public web site, www.gao.gov.

We appreciate your feedback.

Thank you for visiting www.gao.gov and completing our survey.

1.2.3 Handling Case 2

Handling Case 2 comments may require composing an e-mail to searchgao@gao.gov and/or GAO Webmaster in addition to composing a response to the user. If there is a search-related comment or comment that otherwise needs to be forwarded to WSG for handling, respond to that comment with "Your comment is being forwarded to the appropriate office."

Forward search-related comments by doing the following:

If a comment is search-related, send an e-mail to searchgao@gao.gov. Identify yourself in the e-mail. Provide the relevant comment(s) and the user's e-mail address in the e-mail.

A sample e-mail for a search-related comment is provided below:

Recipients:

To: searchgao@gao.gov

CC: GAO Webmaster; SRA, Web Operations Support Manager; SRA, Lead Operations Developer; TPOC

Subject: U.S. GAO Foresee Survey Search-Related Comment Received on [date]

Body:

Below are search-related comments a user entered on the Foresee survey.

Thank your for your assistance.

[Your name]

User: user's e-mail address

In response to the survey item "If you could make one improvement to the site...," the user wrote: "User's comment."

Forward comments that are not search-related by doing the following:

If a comment is not search-related but needs to be handled by WSG, send an e-mail to the GAO Webmaster; identify yourself in the e-mail; and provide the relevant comment(s) and the user's e-mail address.

A sample e-mail to WSG about a comment not related to search is provided below:

Recipients:

To: GAO Webmaster

CC: GAO Webmaster; SRA, Web Operations Support Manager; SRA, Lead Operations Developer; TPOC

Subject: U.S. GAO Foresee Survey Search-Related Comment Received on [date]

Body:

GAO Webmaster,

Below are comments a user entered on the Foresee survey.

Thank your for your assistance.

[Your name]

User: User commenter

In response to the survey item "If you could make one improvement to the site...," the user wrote: "User's comment."

If the comment is not search-related, and if you know how to address the comment, respond to that comment.

A sample e-mail to the user is provided below. (You may paraphrase the survey comment instead of quoting it.)

Recipients:

To: User commenter.

BCC: GAO Webmaster; SRA, Web Operations Support Manager; SRA, Lead Operations Developer; TPOC

Subject: U.S. GAO Foresee Survey Comment Received on [date provided]

(Where "[date]" stands for the date, the user completed the survey).

Body:

This message is in response to a comment you entered into the customer satisfaction survey running on GAO's public web site, www.gao.gov. Since you included an email address, IMPD is following up with you.

You made the comment:

"User comment."

[Respond as appropriate by providing information, requesting clarification, or indicating that the comment is being forwarded to the appropriate office.]

In response to the survey item "If you could make one improvement to the site...," you wrote:

"User comment."

[Respond as appropriate by providing information, requesting clarification, or indicating that the comment is being forwarded to the appropriate office.]

Thank you for visiting www.gao.gov and completing our survey.

1.3 Webmaster Email Spreadsheet

Beginning November 28, 2005, selected e-mail messages are being recorded in a spreadsheet according to category.

The spreadsheet into which the 2006 e-mails are copied is in the Documentation Management System (DM) under GAOHQ-1489373-v3-WEBMASTER_E-MAIL_2006.XLS. The reference for the spreadsheet containing the e-mails received during November and December 2005 is GAOHQ-1458106.XLS.DRF.

The categories that were provided by the GAO Webmaster are

- Content
- Design/Layout/Navigation
- Searching
- Browsing
- Comptroller General Decisions
- Careers
- Other

WebOps added another category: Listserv

Each year will be associated with a new workbook. This workbook separates monthly data using tabs where the tab is labeled according to month and year (i.e. "December 2005") in which the e-mail was received. E-mails received between November 28, 2005, and January 4, 2006, will be recorded in a worksheet labeled December 2005. The reference number for the document is GAOHQ-1458106.XLS.DRF. On January 5, 2006, a new document (associated with new DM number) was

created. It will contain worksheets for January 2006 through December 2006, covering dates January 5, 2006 through January 4, 2007. There will be a different document and DM number for each year.

1. Delivery of monthly spreadsheet is on the fifth of each month

Sample transmittal e-mail recipients, subject, and content are provided below:

Recipients:

To: GAO Webmaster

CC: SRA, Web Operations Support Manager; SRA, Lead Operations Developer; TPOC

Subject: Webmaster E-Mails Received August 5, 2006- September 4, 2006

Body:

Attached is the DM reference for the workbook containing the August 2006 spreadsheet that contains e-mail messages received in the Webmaster mailbox between August 5, 2006, and September 4, 2006, classified by category.

2. Data recording began on November 28, 2005, and the first spreadsheet spanned November 28, 2005 to January 4, 2005 with delivery on January 5, 2005.

For each e-mail received (other than spam or auto response e-mails), the following information is recorded in a spreadsheet cell under the appropriate category:

- Date
- Subject
- Body

Personal information (name, address, social security number, user id, password, e-mail address, or other information that could identify the user) should be removed from the record.

1.4 Posting Orders for Comments

1.4.1 Requirements

If a request does not include a member of WSG as a recipient, forward the request to WSG and wait for authorization from WSG before proceeding.

The following items must be delivered with the request for posting of this Order for Comment

- 1. Hyperlink map file (text format)
- 2. GAO Order Document (MSWord format)

If anything in the request is unclear, contact WSG for assistance. In particular, if no hyperlink map file is provided, or it the hyperlink map file is incomplete, contact WSG.

1.4.2 Deployment

Files used to post orders for comment are located on Inxpro2. At some point this might change.

- 1. Open the Hyperlink document in MS Word.
- 2. Remove the title.
- 3. Ensure that each line in the document begins with a number.
 - a. Example A:
 - i. Begin Example

- ii. Sample Text
- iii. Each line should start with a number; disable word wrap if necessary
- iv. End of Example.
- 4. Save the document as a Windows plain-text file (*.txt).
- 5. Open the GAO Order document in Word.
- 6. Save it as a web page (*.HTML).
- 7. Load the web page in Macromedia Dreamweaver.
- Select Commands → Clean up Word HTML.
- Every line of the hyperlink map describes where a hyperlink/image file should be placed in the HTML file. The code below should be inserted as dictated by the hyperlink document. See Example B for the HTML code.
 - a. Example B:

```
<a href="http://escher.gao.gov/cgi-bin/feedback/<GAO Order
#>?topic=<topic number>" target="_new"><img src="fbpic.gif"
alt="Submit comments about this section."></a>
```

- 10. The **topic number** in the hyperlink should correspond to the number found in the **GAO hyperlink** map.
 - a. Example C:
 - i. Imagine using the example hyperlink map Example A.
 - ii. We will place this snippet of code for the topic 'Sample Text' in GAO Order 2500:

```
<a href="http://escher.gao.gov/cgi-
bin/feedback/2500?topic=2" target="_new"><img
src="fbpic.gif" alt="Submit comments about this
section."></a>
```

- 11. Create a hyperlink in the GAO Order web page for every line in the GAO hyperlink map.
 - a. Place the GAO Order web page in the directory: /opt/data/escher/apache/htdocs/comments/orders on Inxpro2.

Change permissions on the HTML file to 777.

- b. Issue the command cd /netra/tmp to change directories
- c. Create a directory that corresponds to the GAO Order
- d. Change directory to the newly created directory (/netra/tmp/<directory>). From that location, **change the permissions on the directory** by issuing the command:

```
sudo chmod 777 .
```

- i. The dot is the current directory.
- e. Place the hyperlink map text file in the newly created directory.

Change the permissions on the hyperlink map text file to 777.

- f. Create a project configuration file. The file should be placed in /opt/data/escher/comments. Start by creating a text file that corresponds to the order number.
- g. Add the following variables, specific to the project to conform to the project.

 i. Example D: In this example, IMPD will modify the orders configuration file (2500.cfg) for GAO Order 2500:

```
Band
         IIB--GAO
                  Analyst,
                            Specialist
                                        and
                                             Investigator
     Performance Standards
package main;
$data directory = '/netra/tmp/band2bperformancestandards';
$html file='' #- to be used when the entire item for
     comment consists of one HTML file
#$html_directory #- full path to the directory where
     multiple HTML files which make up the item for
     comment reside
$DBM = 'band2bperformancestandards';
$form_title = 'Band IIB--GAO Analyst,
                                          Specialist
                                                      and
     Investigator Performance Standards';
$identifier = 'topic';
$recipient = 'famousr@gao.gov';
$expiration = 'January 2, 2010';
1;
```

If the request does not specify a recipient or an expiration date, contact WSG for assistance obtaining these. Usually the expiration date provided is the last day on which the order must be available for comment. The expiration date in the config file has to be one date later than the last day the order is available. If the expiration date in the config file is incorrect, it creates serious problems for many parties. If you have any question about which date should be used, contact WSG.

The date must be entered in the format shown above. If a comment set is to be available indefinitely, the expiration date would be empty as illustrated below.

```
$expiration = '';
```

Note: At some point, IMPD began to omit the \$html_file=""; Always include the \$html_file="" whenever the HTM file is on the same server as the comment set. When archive_feedback is run to archive the files and clean up the directories, it cannot archive or delete the HTM file if the location is not specified in this variable.

- h. Change permissions on the config file to 777.
- Go back into the data directory. In this example, it would be /netra/tmp/2500 so you would type: cd /netra/tmp/2500
- j. Issue this command to activate the survey: makedbms <GAO Order #> <GAO Order#>.txt
 - i. Example E:

```
makedbms 2500 2500.txt
```

k. View the contents of /netra/tmp/2500/. A new file that has no file extension should be there. The filename will be the name you are using for the files; so, in the 2500 example, the filename would be 2500.

Change permissions on this new file to 777.

I. Issue the Example E command again: makedbms 2500 2500.txt (substituting for 2500 the name you are using for the comment set you are currently processing).

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m. Open a web browser and test the hyperlinks to ensure the comments work!

http://escher.gao.gov/comments/orders/<GAO Order #>.htm http://escher.gao.gov/comments/orders/2500.htm

- n. Click on each link and make sure that the heading in the link is appropriate for the associated section. Add a test comment, and submit. Then return to the first link, open it, and send another test comment.
 - i. If there are problems, use at the Linux command line

perl -cw configfilename.cfg

to get more information about what the problem might be.

ii. Make sure to run config files through

dos2unix filename

to clear any non Linux characters. Particularly, if additional code is used in the config file for users to identify their employee group, the EOT line must have a Linux line ending character, which is different from a DOS or Mac line ending character.

iii. Also, when setting up an order for comment, to view errors use at the Linux command line the following: perl -cw configfile.cfg

1.4.3 Adding Radio Button Choices to Comment Forms

Occasionally, there is a need to allow users to choose from radio button options. For example, the user can then identify to which employee group he belongs. WSG will provide the code that must be inserted in the config file. An example of a config file that contains this additional code is provided below. The additional code is the code between "\$expiration=""; and "1;".

Table D-1 GAO Order 2500.1: Compensation Administration

```
package main;
$data_directory = '/netra/tmp/2500_1_may2009';
$DBM = '2500 1 may2009';
$form_title = 'GAO Order 2500.1, Compensation Administration in the Government Accountability
Office':
$identifier = 'topic':
$recipient = 'Andersons@gao.gov,braleym@gao.gov';
$expiration = ";
$additional information = << 'EOT':
>
Employees who submit comments may self-identify below as to which employee group they
belong. The purpose of this feature is to help inform the Executive Committee of the views of the
various communities about the alternative SRS and other proposed changes to the Order.
However, you are in no way required to identify either your employee group or your name; all
comments will be fully considered and no additional identification of the source of any comment
will be obtained.
>
<div align="left">
<b>Please choose your group</b><br>
<input type="radio" name="TID" value="APSS">
APSS<br/>
<input type="radio" name="TID" value="attorney">
Attorney<br/>
<input type="radio" name="TID" value="Band I, Band II, Band IIA, Band IIB">
Band I, Band II, Band IIA, Band IIB<br/>
<input type="radio" name="TID" value="band III">
Band III<br/>
<input type="radio" name="TID" value="other">
Other<br/>
<input type="radio" name="TID" value="not checked" checked>
Not checked
<br/>br/>
</div>
EOT
1;
```

Make sure to run config files through the command below to ensure that there is only a $\underline{\text{Linux}}$ end of line character after the "EOT."

dos2unix filename

to clear any non Linux characters. Particularly, if additional code is used in the config file for users to identify their employee group, the EOT line must have a Linux line ending character, which is different from a DOS or Mac line ending character.

(Note from Steve Palincsar, WSG: In the DOS world, the line ending (newline) is hex 0D0A (carriage return, line feed) and in the UNIX world it is just the line feed 0A. To make things more complex, in the Mac world it is just the 0D. So, Linux sees the text as EOT0D followed by a newline, and EOT0D does not match EOT.)

Also, when setting up an order for comment, to view errors use at the Linux command line

perl -cw configfile.cfg .

1.4.4 Rush Orders for Comment

PDF of the order will be provided. For each item on the hyperlink map, there needs to be a separate PDF that corresponds to it. The PDF is made using the original complete PDF. To create a separate PDF for each section, delete the pages preceding and following the section in question, and save the remaining section as a filename that reflects the order number and section. For example, if the order is 2540.4, and there is an item in the hyperlink map associated with Chapter 1, name the newly created file something like ch1_2540_4.pdf. Do not use hyphens in filenames of any of the files used for orders for comments (config or hyperlink map text files).

Be sure to ask whether the order for comment is to be placed on gaoweb.gao.gov/comments/ or on escher.gao.gov/comments/orders/.

Create a web page. On it list the sections associated with the hyperlink. Under each section listed include a link to the PDF associated with the section. Label the link "View PDF". Beside the link add a link to the feedback topic number. Label the link "Comment". Figure E-1 shows sections listed as described on an Order for Comment page. (http://gaoweb.gao.gov/comments/performance/2540.4.html)



Figure D-1 Sample Rush Order for Comment Web Page

A feedback topic number is the number of the topic (or section) listed in the hyperlink map. The link to a feedback topic will be

http://escher.gao.gov/cgi-bin/feedback/xxxx?topic=i

where xxxx is the filename of the related hyperlink map minus the file extension, and i is the number of the topic (or section) in the list in the hyperlink map.

Keep in mind that the requester's hyperlink map rarely includes a topic (or section) labeled "General Comments," but it is likely that the requester wants to provide an option for the user to make a general comment. Refer to Figure E-1 above for an illustration of the following instructions

Before the sections listed on the web page include a line that reads

General Comments:

Below it include a hyperlink labeled

View PDF (entire order)

that links to the PDF that includes the entire document. Beside the words "View PDF (entire order)" include a hyperlink labeled "Comment" that links to the feedback topic number associated with the "General Comments" item in the hyperlink map list.

1.4.5 Scheduling Delivery of Comments to Recipient

 Add an entry for to the cron table on Inxpro2. To access the cron table, use the webmaster account.

sudo su - webmaster

2. To view the cron table, type

crontab -1

3. To open the cron table for editing, type

crontab -e

a. The editor is Pico.

A sample line is provided below:

10 0 * * 6 /usr/local/bin/mail latest name of comment set

There are 7 parameters: 10, 0, *, *, 6, usr/local/bin/mail_latest, and name of comment set.

Orders for comments will always have "usr/local/bin/mail_latest" as the 6th item listed. The last item will be the name of the comment set (minus any file extension).

- The first item is the minute of the hour (from 0 to 59).
- The second item is the hour (from 0 to 23).
- The third is the day of the month (from1 to 31)
- The fourth is the month (from 1 to 12)
- The fifth is the day of the week (from 0 to 6, where 0 is Sunday)

Normally WebOps adds the entry in time for the first delivery to be scheduled and then deletes the comments out the entry after the last delivery has taken place instead of specifying the active time period by assigning values to the third and fourth items.

Be sure to comment out the entry after the last delivery has taken place.

1.4.6 Archiving Comments

The script that archives comments provided in response to orders for comments is provided below. Details about the program's function can be found in the DESCRIPTION section.

```
#!/usr/bin/perl
# archive_feedback
# This program archives and distributes comments received via the
# feedback application. See DESCRIPTION section for details about the
# program's function.
use Archive::Zip qw( :ERROR_CODES :CONSTANTS );
use strict;
use DB File ;
use Date::Manip;
use MIME::Lite;
use Carp;
use Getopt::Long;
# Define location where configuration directories are written here
my $configuration directory = '/opt/www/escher/comments/';
# Managers of the Comment program
our $from = 'palincsars@gao.gov';
our $administrators = 'palincsars@gao.gov,garnerm@gao.gov';
$administrators .= ',smitht@gao.gov,hodgesj@gao.gov';
my $nomail; my $verbose;
my $result = GetOptions (
"verbose"=> \$verbose,
"nomail" => \$nomail); # flag
my $comment set = shift;
# Print documentation if no comment configuration file provided
die <<EOT unless $comment_set;
archive_feedback
NAME
archive_feedback package
up, distribute and archive comments
received via the feedback mechanism
SYNTAX
archive feedback [ nomail
] comment configuration
DESCRIPTION
This program is used at the conclusion of the comment period to
package up and distribute comments to the recipients designated
```

```
in the comment configuration file. It creates a zip file of
the comments called whatever name was given to the comment
configuration (with a .zip file extension)
Unless the nomail
command line option is given, the program
emails the zip file as an attachment to the addressees
designated in the configuration file, if they are provided.
If the nomail
command line option is given, the zip file
will be mailed to the administrators designated in the
configuration section of the program rather than to the
addressees indicated in the comment configuration.
The purpose of the nomail
option is to allow the use of this
program as a tool for cleaning up old comment sets.
This program also creates a more complete zip archive that
includes both the DBM file and the configuration file, called
comment configuration.archive.zip.
Both zip files are saved in the current working directory.
AUTHOR
Stephen F. Palincsar 2025123947
2005.11.09
EOT
# Add extension to comment set name if req'd
unless ($comment_set =~ /\.cfg$/ ) {
$comment_set .= '.cfg';
}
# Compile the config file
print "Compiling $comment_set\n";
unless (my $return = do $configuration_directory . $comment_set) {
die "Can't compile $configuration_directory$comment_set, $!\n";
# Check the date: make sure it's after the end of the comment period
print "Checking to see that comment period is over\n";
if ($::expiration) {
# Set in configuration file, maybe
my $expires = ParseDate($::expiration);
my $today = ParseDate("today");
my $flag = Date_Cmp($expires,$today);
unless ($flag < 0) {
# comment period is still open
die "Cannot archive $::form_title:\nComment period doesn't close
until $::expiration\n";
}
}
```

```
else {
print STDERR "No expiration date set in config file. WARNING: this
may be a permanent comment set.\n";
print STDERR "Proceed anyway? [Y/N] ";
my $continue = <>;
chomp $continue;
die "\nTerminating operations at user request\n" unless $continue eq
'Y';
}
# Open the DBM file
print "Opening DBM file for comment set\n";
my $dbmfile = "$::data directory/$::DBM";
tie my %dbm, 'DB_File', $dbmfile, O_CREAT O_RDWR, 0666, $DB_HASH or
warn "Can't tie $dbmfile, proceeding anyway\n";
# Create ZIP file, setting comment to name of comment set
my $zip = Archive::Zip>
new();
$zip>
zipfileComment( $::form title );
# Get list of actual comment files to archive
opendir(DIR, $::data_directory) or die "Can't open $::data_directory
for reading, $!\n";
my @files = readdir(DIR);
closedir(DIR);
# only list actual comment files
@files = grep ( /\.0$/, @files);
# Load the files into the archive
my $member;
foreach my $file (@files) {
# rename each file to the topic name from the DBM file
my (\$newfile) = \$file =~ m \mid ^([^.]+) \mid .0 \mid ;
die "Unable to capture base file name in $file\n" unless $newfile;
$newfile = $dbm{$newfile};
$newfile ||= $file;
$newfile =~ s|\W|_|g; # convert nonword
chars to _
$newfile =~ s|_$||; # delete trailing underscore
$newfile .= '.txt'; # add extension
# add to zip archive
print "Converting to DOS format and adding $file to archive as
$newfile\n" if $verbose;
my $type = `file $::data_directory/$file`;
unless ( $type =~ /CRLF/ ) {
system ("/usr/bin/perl pi
```

```
's \n \r\n |g;'
$::data_directory/$file") == 0
or warn "conversion of line endings failed in $file: $?\n";
$member = $zip>
addFile( "$::data_directory/$file",$newfile );
# Save file to disk
print "Writing $comment_set.zip\n";
my $fh = IO::File>
new( "$comment_set.zip", 'w' );
if ( $zip>
writeToFileHandle( $fh ) != AZ_OK){
# error handling
die "Creation of zip file $comment_set.zip failed\n";
close $fh;
# Mail zip file to designated recipients
if ($::recipient) {
unless ($nomail) {
print "Mailing $comment_set.zip to recipients $::recipient\n";
mail_zip("$comment_set.zip", $::recipient);
else {
# Nomail option was selected
print "Mailing $comment_set.zip to administrators\n";
mail_zip("$comment_set.zip", $::administrators);
}
}
else {
print "No designated recipients mailing
$comment_set.zip to
administrators\n";
mail_zip("$comment_set.zip", $::administrators);
# Add config file and DBM file to zip archive
print "Adding $comment_set to zip file\n";
$member = $zip>
addFile
("$configuration_directory$comment_set", "$comment_set");
print "Adding DBM file $::DBM to zip file\n";
$member = $zip>
addFile($dbmfile, $::DBM);
# Save copy of enhanced zip file in current directory
$fh = IO::File>
```

```
new( "$comment_set.archive.zip", 'w' );
if ( $zip>
writeToFileHandle( $fh ) != AZ_OK){
# error handling
die "Creation of enhanced zip archive $comment_set.archive.zip
failed\n";
close $fh;
print "Enhanced $comment_set.archive.zip file written to ";
print `pwd`;
# Now clean up the trash
print STDERR "Ready to delete configuration file and comments
directory.\n";
print STDERR "Proceed with deletion? (Y/N) ";
my $answer = <>;
chomp $answer;
unless ($answer eq 'Y') {
die "Terminating without deleting configuration file and comments
directory at user request\n";
else {
# delete config file
print "Deleting configuration file
$configuration_directory$comment_set\n" if $verbose;
unlink ("$configuration_directory$comment_set") or
warn "Couldn't delete $configuration_directory$comment_set, $!\n";
# Delete all the files in the comment directory
print "Deleting all files in $::data directory\n";
opendir (DIR, $::data_directory);
my @all_files = readdir(DIR);
closedir(DIR);
@all_files = grep(!/^\./, @all_files);
print "Found ", scalar @all_files, " files\n";
print "Changing to data directory $::data_directory\n";
chdir($::data_directory) or die "Unable to change to
$::data_directory, $!";
print "Ready to delete all files\n" unless $verbose;
foreach (@all_files) {
print "Ready to delete $_\n"if $verbose;
unlink($_) or warn "Unable to delete $_, $!\n";;
}
chdir (".");
# Remove the comment directory itself
print "Deleting $::data_directory directory\n";
rmdir ($::data_directory) or warn "Unable to delete $::data_directory
```

```
directory, $!\n";
}
sub mail_zip {
my $zipfile = shift;
my $recipient_list = shift;
my $txt = << EOT;
Attached is a zip file containing comments received on $::form_title.
This is an automated message. Please do not reply to it.
### Create a new multipart message:
my $msg = MIME::Lite>
new(
From => $from,
To => $recipient_list,
Cc => $administrators,
Subject => "Archiving of Comments on $::form_title",
Type => 'TEXT',
Data => $txt,
);
### Add parts (each "attach" has same arguments as "new"):
$msg>
attach(Type =>'application/zip',
Path => $zipfile,
Filename => $zipfile,
Disposition => 'attachment'
);
### Send in the "best" way (the default is to use "sendmail"):
$msg>
send;
END
```

1.5 Active Assignments: Description and Overview

In the middle of the month, the Active Assignments site on the GAO watchdog server is updated. Instructions for updating the site are included below.

1.5.1 Interface

The User can access the Active Assignments from a web browser.

- 1. Open IE.
- 2. Type in the Location bar: http://watchdog.gao.gov/activeasn/welcome.php3.

1.5.2 Main Screen

Figure D-2 Active Assignments: Main Screen



This page was prepared primarily to inform Members of Congress and congressional staff of GAO active assignments. For questions regarding this report, call the GAO Office of Congressional Relations at (202) 512-4400.

This information was compiled from internal management information systems of GAO; some background and key questions may appear in abbreviated form. The information reflects a snapshot in time of assignments that were active as of the date that the information was retrieved. New active assignments added to the page will be flagged as "New!" Pending and completed assignments are not included. A listing of completed GAO products is available through the GAO homepage - www.gao.gov. Questions regarding specific active assignments should be addressed to the assignment contact person.

Table D-1 Listing of Active Assignments Options

Select	Description
Search	Search the Title and the background/key questions for all active GAO assignments
Due within two weeks	Displays active GAO assignments due to be issued within two weeks from the last update
New Assignments	Display all new GAO assignments added since last update
By GAO Strategic Objectives	Displays active GAO assignments by strategic objectives
All Assignment Titles	Displays all active GAO assignments by Title
All Active Assignments	Displays all active GAO assignments with details (approx. 640KB)
Glossary of Terms	A description of the terms used in this database.

1.5.3 Search

Figure D-3 Search Screen



If the down-arrow is pressed the "Within a GAO Strategic Objective" options are displayed in a drop-down. Figure D-4 below displays the drop-down box displayed.

Back | Home

Search

Within a GAO Strategic Objective. All

Estact | All

A Secure Retirement for Older Americans
Advancing U.S. International Interests
Education and Protection of the Nation's Children (EPNC)
Effective System of Justice
Energing Security Threats
Fiscal Position of the Government
Globul Market Forces
Health Care Needs and Financing
Key Mgrid Challenges 8 Program Risks (KMCSPR)

Mith EXACT searches deselected, searches are not case-sensince
With EXACT searches deselected, searches are not case-sensince
Key Mgrid Challenges 8 Program Risks (KMCSPR)

Mid return Senator and
Midray Capabilities and Readiness

Under Needs and Financing
Key Mgrid Challenges 8 Program Risks (KMCSPR)

It returns all messages that contain those words anywhere (Typing AND is not required)

QUOTES (*) eliminates words That is, a search for dog and -cat returns all messages that contain dog but not cat. You can MIRIUS a phrase in QUOTES, like dog

"siamuse cat"

The title and the background/key questions are rescribed.

Figure D-4 Within a GAO Strategic Objective Options

Search Tips

Exact searches are not case-sensitive and use word boundaries. For example, "nato" would return "NATO" but not "Senator".

With exact searches deselected, searches are not case-sensitive and word boundaries are not considered. For example, "nato" would return "Senator" and "NATO".

The word "and" is the default for multiple words. That is, a search for "dog" and "cat" returns all messages that contain those words anywhere. (Typing "and" is not required)

Quotes (") allow searches for phrases. That is, a search for "dog cat" returns all messages that contain that exact phrase, with space. Leading and trailing spaces inside quotes are not used.

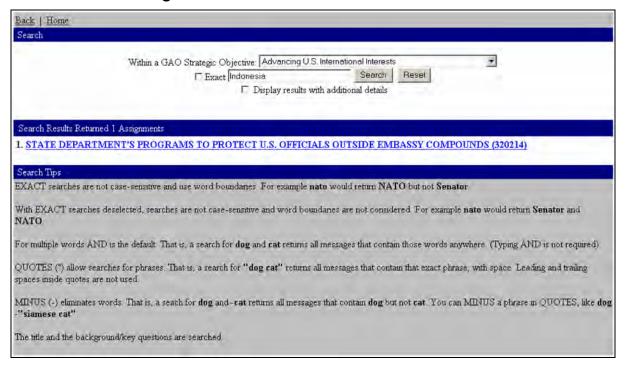
Minus (-) eliminates words. That is, a search for **dog** and **-cat** returns all messages that contain **dog** but not **cat**. You can minus (-) a phrase in quotes, like **dog -"Siamese cat"**.

The title and the background/key questions are searched.

Search Results

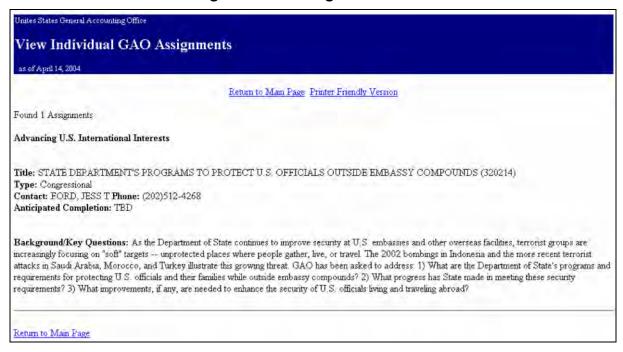
Figure D-5 below shows the search results for "Indonesia".

Figure D-5 Search Results on "Indonesia"



The user can read the assignment questions by clicking on the topic. Figure D-6 below is a display of the above topic.

Figure D-6 Assignment Detail



The user can click on the link to "Return to Main Page" or select a "Printer Friendly Version" of the document.

Due within Two Weeks List

When the user clicks on this option, a list of all the assignments due within two weeks is displayed. Figure D-7 is a partial view of the listing as 42 assignments are contained within the list. This is a "Read Only" display.

Figure D-7 GAO Assignments Due To Be Issued Within Two Weeks



The user can click on "Return to Main Page" or "Printer Friendly Version."

1.5.4 New Assignments

"New Assignments" is a listing of the latest assignments to be issued. This is a "Read Only" listing and is shown in part in Figure D-8 as there are 91 new assignments within the list.



Figure D-8 New Assignments

1.5.5 By GAO Strategic Objectives

The "By GAO Strategic Objectives" has two screens. The first screen shows the "Strategic Objectives" (Figure D-9) and the second screen shows the assignment listing for the specific Strategic Objective (Figure D-10).



Figure D-9 Strategic Objectives Listing

The user clicks on the specific strategic objective that is desired.

Figure D-10 Strategic Objective Detail

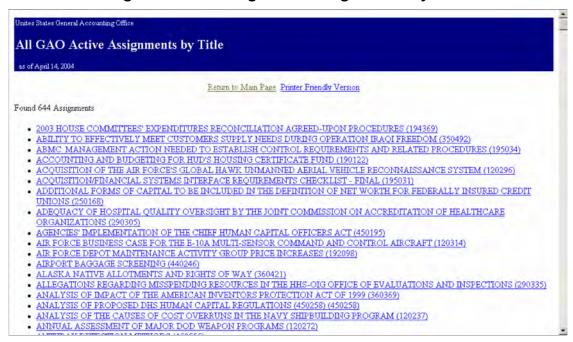


This "Read Only" list contains nine assignments. The user can click on "Return to Main Page" or select the "Printer Friendly Version" to print the list.

1.5.6 All Assignment Titles

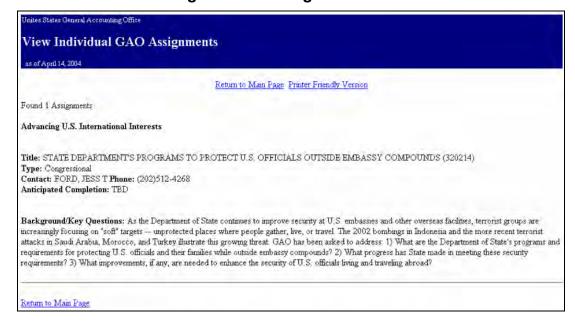
This list provides all of the assignments by "Title". There are two screens. The first is the listing of all assignments by title (Figure D-11) and the second is the .5-specific assignment detail (Figure D-12)

Figure D-11 Listing of All Assignments by Title



This is a partial listing of the 644 assignments within the listing. The user selects the title desired.

Figure D-12 Assignment Detail



1.5.7 All Active Assignments

The "All Active Assignments" is a list of all active assignments. The list shows all of the active assignments in alphabetical order and provides the assignment detail. Figure D-13 is an example of the "All Active Assignments" list. This is a "Read Only" display.

Inites States General Accounting Office All GAO Active Assignments Return to Main Page Printer Friendly Version Found 644 Assignments A Secure Retirement for Older Americans Title: ASSESSING PROGRESSIVITY OF SOCIAL SECURITY REFORM PROPOSALS (130303) Type: Congressional Contact: BOVBJERG, BARBARA D Phone: (202)512-5491 Anticipated Completion: June 22, 2004 Background/Key Questions: Social Security's current benefit formula replaces a higher share of earnings for lower earners than for higher ones, which makes the formula "progressive" Some believe that replacing some or all benefits with individual accounts would reduce this advantage for lower earners, but some proposals to do so also have features specifically designed to enhance benefits for lower earners. Our key questions are (1) how is "progressivity" defined and measured when assessing proposals' effects? (2) how would varied proposals affect the distribution of benefits and contributions relative to earnings, compared with alternative solvent baselines for the current system? A Secure Retirement for Older Americans THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE STREET OF THE ART THE CONTROL OF THE CONTROL OF

Figure D-13 All Active Assignments

The user can click on "Return to Main Page" or select "Printer Friendly Version" to print a copy of the list.

1.5.8 Glossary of Terms

Figure D-14 is the display of the "Glossary of Terms" screen.

United States General Accounting Office Glossary of Terms for GAO Active Assignments Title The long title of the GAO assignment. The title is followed with the GAO assignment number unique to that assignment for identification/tracking purposes. Type Congressional - work initiated in response to congressional request. Mandated - work required by law, conference reports, or committee reports. Research & Development - work initiated by GAO in anticipation of congressional need. Contact Senior GAO official to contact for additional information regarding the specific assignment listed Phone Contact person's phone number. Anticipated If a date is listed, it represents the most current estimate of when the report product will be issued. If "TBD" is listed, the assignment is still Completion in the design phase and a firm estimate of when the report product will be issued has not yet been determined. Background/Key This contains some background about the program being reviewed and the key question(s) to be addressed during GAO's evaluation. Questions Back to Welcome Page

Figure D-14 Glossary of Terms Screen



United States Government Accountability Office

Contract Number: GS00T99ALD0211 | Task Order Number: GSC-TFMG-07-M082

Publishing Technical Support Standard Operating Procedures

Version 4

DATE: June, 2013

DCN: XXXXXXXX | DM# 4167390

Prepared for: U.S. Government Accountability Office 441 G Street, NW Washington, DC 20001

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The table below identifies all changes that have been incorporated into this document. Baseline changes require review and approval.

Change #	Date	Author	Version #	Change Description
N/A	July 8, 2008	Steve Babb	1.0	Initial submission of document. (DM#2565322)
1.0	September 2010	Meredith Bradley	2.0	Update of and addition to document.
2.0	November 2011	Steve Babb	3.0	Update to existing documentation
3.0	January 2012	Ernest Powell	3.1	Update to CD Creation
4	March 2012	Jen Peiler	3.2	Update to Preflight/Prepress documentation
5	June 2013	Steve Babb	4	Recombined most recent SOPs into one document

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1 Definitions and Acronyms

1.1 Terms Used in this Guide

E-supplement: Electronic Supplements, at GAO, are web-based products that support regular GAO PDFs. These supplements are often burned to CDs for release to Congress, which PTS supports.

<u>Failure</u>: Part of the ticketing system terminology, Failure refers to tickets concerning failure of a program or process, for example a corrupted document. Failures can also include "How To" questions.

<u>Incident:</u> Part of the ticketing system terminology, an Incident can be any call entered and tracked within the ticketing system.

<u>Image Database:</u> PTS maintains a database of stock images for use in GAO products. The Image Database refers to the computers these images are stored on, as well as the MySQL scripts to add and manage images.

MS Office: MS Office refers to any of the Microsoft Office products that GAO uses and PTS Supports. Examples are Word, PowerPoint, and Excel.

<u>PitStop:</u> Enfocus PitStop is a program PTS uses to help with preparing reports and graphics for print and posting to the web. PitStop allows PTS to manage the Visual Standards set forth by GAO by means of actions and profiles that can be run on each document. These actions and profiles help us apply the standards more consistently.

<u>Preflight:</u> This is the process by which PTS checks graphics against GAO's standards before they are incorporated into a report.

<u>Prepress:</u> This is the process by which PTS checks reports before they are sent out for printing. The prepress checks include everything from checking image resolution, to making sure all elements appear on the correct color plates.

Request: Part of the ticketing system terminology, Request refers to tickets concerning specific requests of the PTS group (for example, a request for a preflight of a graphic.)

1.2 Acronym List

Acronym	Definition
B/W	Black and White
CA	Communications Analyst
CD	Compact Disc
CMYK	Cyan, Magenta, Yellow, Black Color Spectrum
CS4	Adobe Creative Suite 4
CSV	Comma Separated Values
DVD	Digital Versatile Disc
E&IT	Accessible Electronic Information Technology
FOUO	For Official Use Only
GAO	Government Accountability Office
ITSM	Information Technology Service Management
LOUO	Limited Official Use Only
PAG	Product Assistance Group
PDF	Portable Document Format
POC	Point of Contact
PPC	Print Procurement Color file
PTS	Publishing Technical Support
QA	Quality Assurance
VCA	Visual Communications Analyst

2 Introduction

Publishing Technical Support (PTS) provides support to GAO's Publishing and Dissemination Group, which includes the Electronic Publishing Staff, Quality Assurance (QA), Print Procurement, and GAO Mission Team Visual Communications Analysts (VCAs).

2.1 Main Support Areas

- 1. Preflight/Prepress Operations:
 - a. Advanced preflight of graphics
 - b. Prepress of Color reports in preparation for Printing
 - c. General Graphics best practices and guidance
- 2. CD Production and Multi-Media
 - a. Creating CDs of GAO products
 - b. Maintaining CD templates for different product types
 - c. Flash Animation projects
 - d. Web based multi-media projects (e.g., Google Vis, Fusion Charts or Fusion Maps)
- 3. Report Generation
 - a. Template Support
 - i. MS Word Templates
 - ii. MS PowerPoint Template
 - iii. Adobe FrameMaker
 - iv. Adobe InDesign
 - b. Support of Scripting Languages
 - i. VBA (MS Word & Powerpoint)
 - ii. Adobe FrameScript (FrameMaker)
 - iii. JavaScript (InDesign)
 - iv. Note: Development and coding is mainly supported by the PTS MS Word Leads
 - c. MS Office Support
 - PTS supports advanced requests for using MS Word, MS Excel & MS Powerpoint
 - ii. PTS supports using VBA (and XML)to customize GAO's use of MS Office
 - Customized Ribbon Tabs for best practice task & to implement customized automation solutions
 - iii. PTS provides expertise on configuring MS Office Settings
 - d. Adobe Acrobat PDF Generations
 - i. PTS supports best practice settings and procedures for generating product PDFs
 - ii. PTS provides expertise on configuration Adobe Acrobat Professional settings for GAO wide use.P
- 4. Adobe Creative Suite Best Practices
 - a. Best practices for creating charts and illustrations in Adobe Illustrator
 - b. Best practices for creating multi-media (roll overs and buttons) in Adobe InDesign
 - c. Customized settings for Adobe Creative Suite products
- 5. Help Desk Support
 - a. Adobe Creative Suite products
 - b. MS Office applications
 - c. Adobe Acrobat Professional
- 6. Section 508 Compilance

All PTS staff are cross-trained in the main support areas for Publishing, as well as in the general help desk support tasks.

2.2 Section 508 Support

GAO reports and testimonies are provided in PDF and text formats. GAO PDF products are not fully 508 compliant, and GAO offers full text versions of all reports and testimonies to fulfill compliance requirements. PTS supports the FrameScript augmentation of FrameMaker to generate these text files.

While GAO uses good practices in preparation of its source documents (MS Word, Adobe FrameMaker, and Adobe InDesign), some elements of the documents do not retain full 508 compliance when they are converted to PDF (primarily tables). The PDF files require manual editing to be fully 508 compliant. GAO currently meets the requirement to provide 508 compliant versions of its reports by providing full text versions of the publications. PTS is supporting GAO to imeplement procedures to make their product PDFs more 508 compliant (by tagging and generating 508 compliant PDFs using CommonLook Office & by adding procedures to add alternative text to all graphics and summaries to all tables).

PTS supports GAO's 508 compliance by maintaining the accessibility of all GAO source document templates, as well as providing guidance when PDFs need to be made fully compliant.

2.2.1 Technical Standards

PTS is familiar with and can provide guidance on Government Section 508 E&IT (accessibly electronic information technology) standards. General standards can be found at: http://www.section508.gov/

U.S. GSA guidelines for creating accessible documents, resources for making 508 compliant websites, and general 'how-to' guidance can be found at: http://www.gsa.gov/portal/content/103565

2.2.2 Section 508 Coordinator

A Section 508 coordinator is key to implementing consistent good practices in 508 compliance at GAO. A formal Section 508 coordinator has not been designated. However, PTS supports all 508 compliant activities at GAO concerning the publishing of documents. PTS stands ready to offer advice and support, should GAO ever move forward with appointing a 508 coordinator.

3 Advanced Preflight: Acrobat 9 and PitStop

PTS provides publishing support for the PAG in a variety of areas, two of these being Preflight and Prepress. Preflight is performed on graphics before they are incorporated into a report to check for correctness according to GAO's Visual Standards. Prepress is performed on finished reports that are being sent to the printer to check for correct printing standards.

In order to help the PAG build error-free graphics, we have a "Preflight" process in place. ALL production staff is encouraged to check their work using the available tools in Acrobat, InDesign, Illustrator and Photoshop, as well as the procedures below, before the artwork is incorporated into a report. Color graphics that are being printed in color should always be sent for Preflight@gao.gov.

3.1 How to Submit Artwork for Advanced Preflight

- Send graphics or photos in a PDF generated from MS Word to preflight@gao.gov. The PDF should include the final TIF graphics.
- File name should be the jobcode, your initials, plus the word preflight, for example 544134_mb_preflight.pdf. PTS keeps a record of all completed Advance Preflights and their respective results. If questions arise later about a Job, we can trace its history to see what went wrong. Using the jobcode makes it easier to retrieve.
- At least the first page of the PDF should have the jobcode, version, and proof date.
 Each graphic should be identified by a figure or table number.
- Please submit color graphics separately from b/w graphics.
- Please include the print specifications for the job. (Will the job be printed in b/w or color?)

3.2 Preflight Procedure: Acrobat 9 (B/W to B/W Graphics)

3.2.1 Open the PDF in Acrobat 9.

- 1. Copy the PDF file to be checked to the desktop.
- 2. Open the PDF in Acrobat 9 Professional.

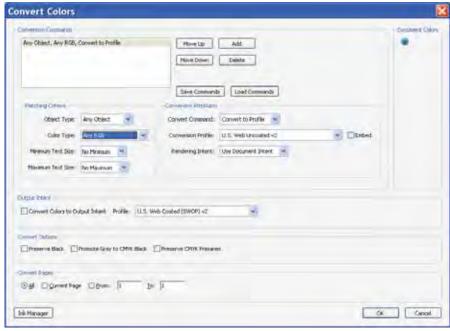
3.2.2 Review all pages.

- 3. Scroll through all pages and review the figures to be preflighted.
- 4. Look for any patterns, color, charts or images, etc

3.2.3 Convert Colors.

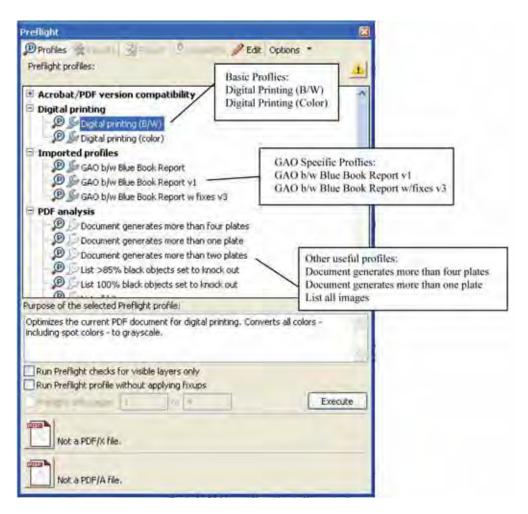
5. Colors in final PDF must be converted to CMYK, before running preflight, due to colors within TIF files being converted by Word 2007 to RGB.

6. Advanced> Print Production> Convert Colors.



3.2.4 Run Acrobat 9 Preflight.

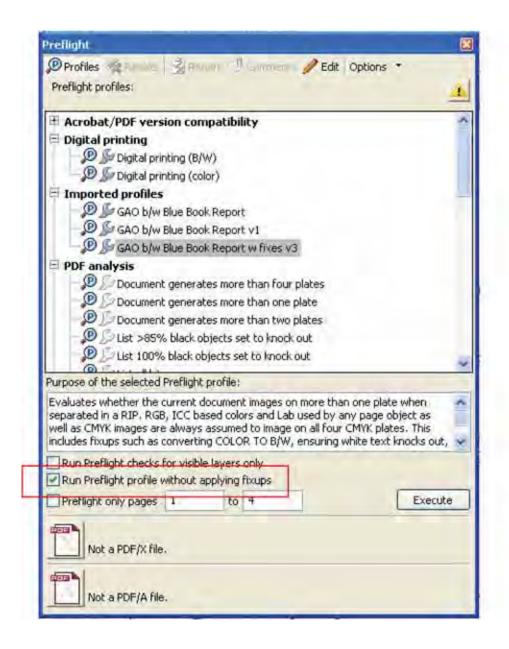
- 7. Acrobat 9 Preflight should be used.
- 8. Acrobat 9 Preflight can be used to inspect a document where problems are apparent or suspected. This step points out errors in the document without applying fix-ups or changing the document architecture.
- 9. Open Preflight by going to Advanced→Preflight.



- 10. A Preflight window will open. You will see different preflight profile options: Acrobat/PDF Version Compatibility, Digital Printing, Imported Profiles, etc.
- 11. What each profile does will display in the "Purpose of the Selected Preflight Profile" box at the bottom of the Preflight window.
- 12. Any of the available preflight profiles can be run on your graphics. The profile that PTS uses is Imported Profiles→GAO b/w Blue Book Report w/fixes v3 (instructions for importing this profile are at the end of this document). Other useful profiles are PDF Analysis→Document generates more than four plates, Document generates more than one plate, and List all images. (To see all the available profiles, click the + next to each category)

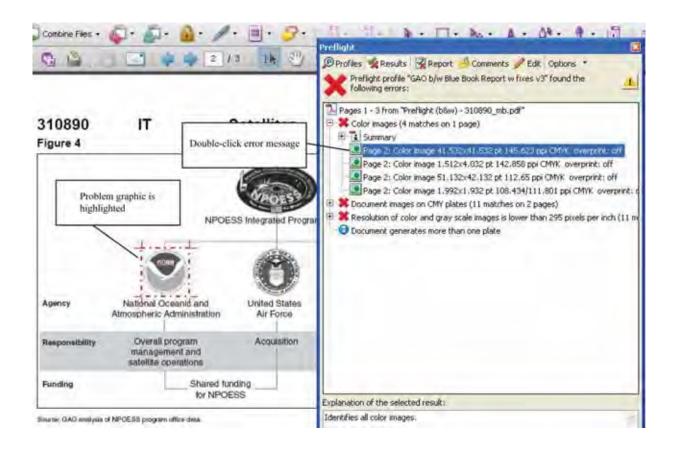
3.2.5 Run GAO b/w Blue Book Report w/fixes v3.

- 13. Open Preflight by going to Advanced→Preflight.
- 14. Expand Imported Profiles (click the +) and select "GAO b/w Blue Book Report x/fixes v3.
- 15. Make sure "Run Preflight profile without applying fixups" is checked. This will ensure that the Preflight does not change the document architecture, but merely points out when there is a discrepancy.
- 16. Click "Execute."
- 17. To run other preflight profiles, such as "List all Images," the same steps apply.



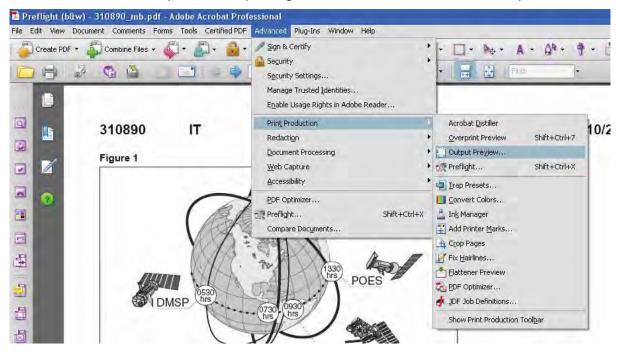
3.2.6 Examine Results from Acrobat 9 Preflight.

- 18. The results from Acrobat 9 Preflight will display in a window. Ideally, you will see "No problems found."
- 19. Examine the results. To see where in the document Acrobat found a discrepancy, double click on the error. A yellow- or red-highlighted box will appear in the file around the offending section.
- 20. To display all results for a given error, click the + next to each error message. This will expand the list and show the individual locations in the report that are causing problems.

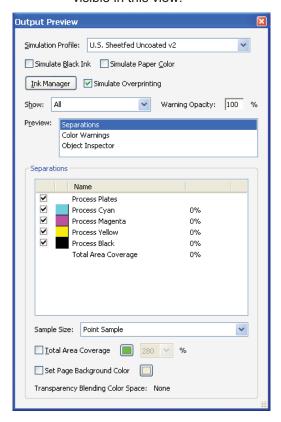


3.2.7 Check Color Separations Using Output Preview.

- 21. Checking the color separations in Acrobat is a good way to ensure there are no incorrect color spaces.
- 22. To view the "Output Preview" panel, go to Advanced→Print Production→Output Preview.



- 23. A pop-up window will appear that displays the separations. The box displays the process plates (Cyan, Magenta, Yellow, Black). Make sure "Show All" and "Preview: Separations" are selected. (Note: This is also a good way to view the percent value of each ink in a document.)
- 24. Uncheck the "Process Black" plate in the Separations window.
- 25. Carefully scan through each page. Should any obvious color exist in the document, it will be visible in this view.



3.3 Preflight Procedure: Acrobat 9 (Color to B/W Graphics)

3.3.1 Open the PDF in Acrobat 9.

- 1. Copy the PDF file to be checked to the desktop.
- 2. Open the PDF in Acrobat 9 Professional.

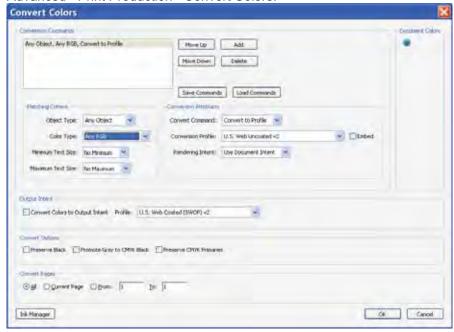
3.3.2 Review all pages.

- 3. Scroll through all pages and review the figures to be preflighted.
- 4. Look for any patterns, color, charts or images, etc.

3.3.3 Convert Colors.

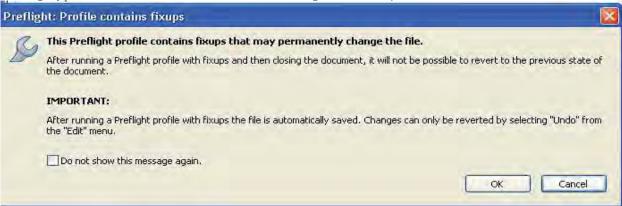
5. Colors in final PDF must be converted to CMYK, before running preflight, due to colors within TIF files being converted by Word 2007 to RGB.

6. Advanced> Print Production> Convert Colors.



3.3.4 Run Acrobat 9 Preflight.

- 7. Acrobat 9 Preflight should be used.
- 8. Acrobat 9 Preflight can be used to inspect a document where problems are apparent or suspected. This step points out errors in the document without applying fix-ups or changing the document architecture.
- 9. Open Preflight by going to Advanced→Preflight.
- 10. A Preflight window will open. You will see different preflight options: Acrobat/PDF Compatibility, Digital Printing, Imported Profiles, etc. Select Imported Profiles, and "GAO b/w Blue Book report w/fixes v3."
- 11. Leave the "Run preflight without applying fixups" unchecked and click Execute. By leaving this unchecked, we are allowing the profile to convert the color to gravscale.
- 12. A message box will appear. This warning message is informing you that applying fixups will alter the document. You need to apply the fixups in this instance, because you want to view the grayscale conversion. Click "Ok" on the message to run the profile.



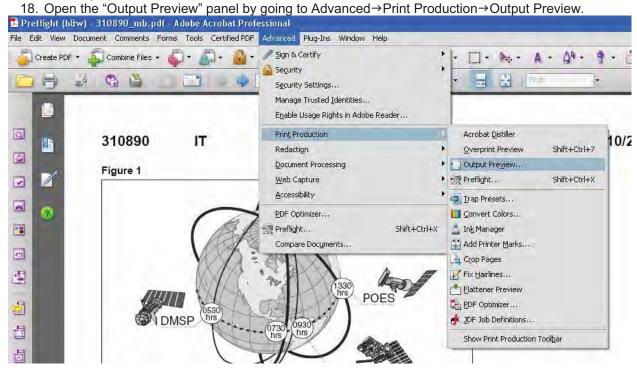
13. Since running the profile with fixups changes the document architecture, you will be prompted to save the preflighted document before the profile runs. You can undo the fixups after you have reviewed the conversion.

3.3.5 Examine Results from Acrobat 9 Preflight

- 14. Examine the results. To see where in the document Acrobat found a discrepancy, double click on the error. A yellow- or red-highlighted box will appear in the file around the offending section.
- 15. To display all results for a given error, click the + next to each error message. This will expand the list and show the individual places in the report that are causing problems.
- 16. Pay particular attention to the color elements and their grayscale conversions, especially the saturation of grays and blacks.

3.3.6 Check color separations using Output Preview

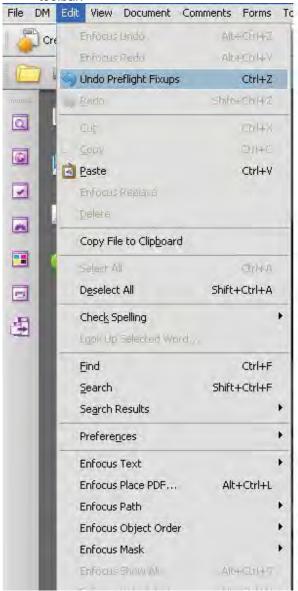
17. Check the color separations to make sure all the color elements have converted completely over to grayscale.



- 19. A pop-up window will appear that displays the separations. The box displays the process plates (Cyan, Magenta, Yellow, Black). Make sure "Show All" and "Preview: Separations" are selected. (Note: This is also a good way to view the percent value of each ink in a document.)
- 20. Uncheck the "Process Black" plate in the separations window. All elements in the document should disappear. If there are color elements that did not convert, checking with this process will make them obvious.

3.3.7 Revert document back to its original state.

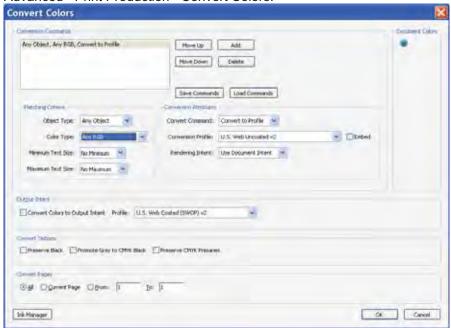
21. After running the preflight profile that applies fixups, the file is automatically saved. To revert back to the original structure, you must select Edit→Undo Preflight Fixups from the main toolbar.



3.4 Preflight Procedure: Enfocus PitStop (Available to EPS Staff)

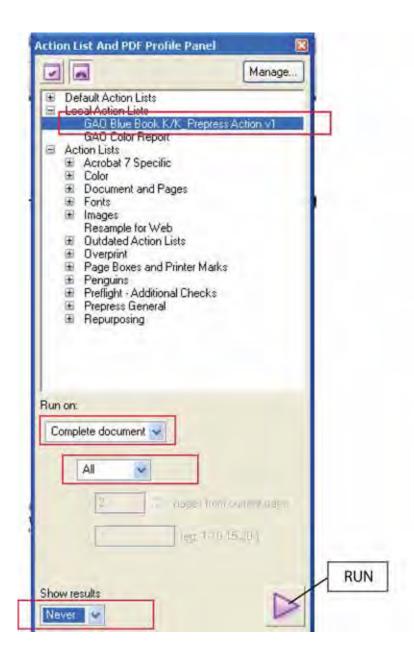
3.4.1 Convert Colors.

- 22. Colors in final PDF must be converted to CMYK, before running preflight, due to colors within TIF files being converted by Word 2007 to RGB.
- 23. Advanced> Print Production> Convert Colors.



3.4.2 Run PitStop Action.

- 24. Open the PitStop Action List Panel by going to Window→Show Enfocus Action List Panel.
- 25. Choose GAO Blue Book K/K Prepress Action v1.
- 26. In the drop-down menus under "Run On," chose Complete Document, and All.
- 27. Show Results should be set to On Error.
- 28. Click Run.



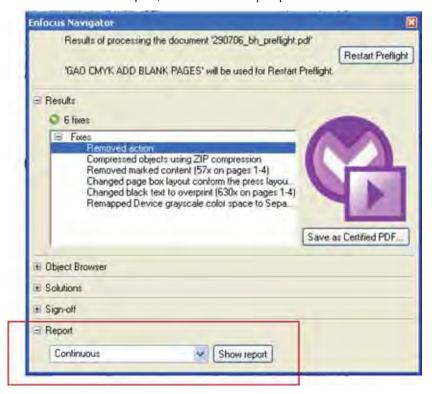
3.4.3 Run PitStop Profile.

- 29. Open PitStop PDF profile Panel by going to Window→Show Enfocus Profile Panel.
- 30. Choose GAO B&W v3.0 and ADD BLANK PAGES (b/w graphics) or GAO CMYK ADD BLANK PAGES (graphics being printed in color.)
- 31. In the drop-down menu under "Run On," choose Complete Document, ALL.
- 32. Uncheck the Certified PDF Preflight, and click Run.



3.4.4 Show and Save the PitStop Report.

- 33. Click the + next to the "Report" line at the bottom of the results screen.
- 34. Select "Continuous" from the drop down menu.
- 35. Click "Show Report." This will open the PitStop report in a new window.
- 36. Once it is open, Save the PitStop report.



3.4.5 Check the PitStop report.

- 37. Carefully review the PitStop report. To highlight where in the document an error or warning is happening, click the magnifying glass next to the listing in the report.
- 38. Be sure to check the following areas of the report for any errors:

		Common Errors	
PitStop	Action	B/W	Color
Errors, Warnings, Fixes	Check for anything out of the ordinary	 More than one plate Low resolution Fonts not embedded Pattern or shading is used RGB, Device N color, spot color, CMYK color 	 More than 4 plates Low resolution Fonts not embedded Pattern or shading is used RGB, Device N color, spot color Insufficient bleed
Gen. File Information	Check the document name and creation date		
Font Information	All fonts should be embedded and subset		
Image Information	Effect. Res. (dpi) = 300		
Color Information	Color space = gray (or CMYK for color graphics)		

3.4.6 Check PDF for errors.

- 39. With all separations on, visually scan document looking for errors, i.e. graying out of elements, black boxes, borders around graphics, or other discrepancies.
- 40. Make sure to check the graphics and figures closely, especially for background color added to a graphic.

3.4.7 Combine PitStop Report with Preflighted Graphics.

41. Using the "Combine Files" function in Acrobat, combine the PitStop report with the graphics file and save as a separate document.

This file should then be sent to <u>GraphicHelp@gao.gov</u> for review, and saved to any appropriate PAG folders for storage.

4 Prepress Reports for Color Printing

Once a full-color report has been completed and QA'd, it needs to go through a separate Prepress process before it can be sent to the printer. The Prepress steps involve running PitStop profiles on the document to convert any CMYK black to 100%K, making a PPC file that will be used by the printer, proofing the cover, etc. This section will detail the steps for performing the Prepress of B/W, Color, and Color Palette Blue Book Reports.

4.1 Prepress: Color Blue Book Reports

Create PPC File	1. Create a ticket in ITSM for the prepress request.
	2. Copy the report PDF from the PAG folder to the desktop.
	3. Open the Pages panel in Acrobat 9, so that two columns of pages show.
	4. Delete white cover page. Highlights page should be page 1.
	5. Insert blank page(s) after highlights page and TOC if necessary. Blanks can be found in U:\For_Printing\Prepress_Documents_and_Covers\ BLANKS\BLANK81-2x11.pdf
	6. Highlights, TOC, and Letter should all start on right-hand side (odd-numbered pages).
	7. If the report has a 2 page highlights file, it is acceptable for the highlights and TOC to abut each other. No extra blank pages are needed between them.
	8. Save as ppc file to desktop (d09753_ppc.pdf)
B/W Pages	 Open PitStop Action List Panel (Gear Symbol on the PitStop Toolbar).
	10. Run PitStop Action "RGB blue to black" on Highlights page.
	11. Run Acrobat Convert Colors on Highlights page, using the settings Color Type: RGB and Promote Gray to CMYK Black.
	12. Run PitStop Action "GAO Blue Book K/K Prepress Action v1" on individual b/w pages (Current Page radio button), or consecutive b/w pages (Range radio button).
	13. Make sure to select "Show Results: On Error"
	14. Repeat process until the Action has been run on all b/w pages in the document.

Color Pages	15. Determine which pages are supposed to have color. (Check with QA if you are unsure which graphics remain color)
	16. Open PitStop Action List Panel (Gear Symbol on the PitStop Toolbar).
	 Run Acrobat Convert Colors on entire document, using the settings Color Type: RGB and Promote Gray to CMYK Black.
	18. Run Action "GAO Color Report" on individual color pages (Current Page) or consecutive color pages (Range).
	19. Make sure to select "Show Results: On Error"
	20. Repeat the process until the Action has been run on all color pages in the document.
Entire Document	21. Open PitStop Profile Panel (Check Mark symbol on the PitStop Toolbar) and run the Preflight Profile "GAO B&W v3.0 and ADD BLANK PAGES" on the entire document.
	22. Carefully check the PitStop report for any anomalies/errors, paying special attention to image resolution, color space, and embedded fonts.
	23. Save PitStop report to the desktop (d09753_PitStop.pdf)
	24. Save the ppc file. Close out of the report entirely.
	25. Reopen the ppc file. Open the Output preview window (Advanced>Print Production>Output Preview). With all separations on, scan through each page carefully, looking for errors such as graying out of elements, black boxes, light backgrounds behind graphics.
	26. Uncheck the "process black" plate in the Output preview window, and scan through the document again. Ensure that only items specifically given color remain on the color plates (railroad tracks should be b/w). All b/w pages should be blank when black is unchecked.

Color Pages: Text, links, railroad tracks remain color	With the black separation unchecked, check the color pages. If elements of the pages such as text, railroad tracks, or links still appear, take the following steps:
	27. Make sure all separations are turned on in Output Preview window.
	28. Open the PitStop Global Change Panel (Globe Icon on PitStop Toolbar).
	29. Choose "Color" from the Category and "Change Specific Color" from the Color Changes section. Go to the Options menu (small gray gear symbol in right-hand corner) and select "Edit.".
	30. Using the PitStop Select Objects Tool, click within a portion of the offending element on the page.
	31. On the "Remap" section, select the Hand icon, and choose Fill from the drop down. In the "To" section, select Device CMYK and set % value to 100% K.
	32. Click "Save". With "Change Specific Color" still selected, change the "Run on" option to "Current Page", and set "Show Results" to "On Error." Click Run.
	33. Repeat the process on all offensive elements on all color pages.
	34. Open the Output Preview Panel again, and turn off the process black plate. On the color pages, only the color elements of the graphics should remain. All text and railroad tracks should disappear.
	35. Save the ppc file.
Set Initial View	The document should open in a full page view, all palettes closed.
	36. Go to File>Properties>Summary, and select the "Initial View Tab."
	37. Change the Navigation option to "Page Only."
	38. Change the Page Layout option to "Single Page."
	39. Change the Magnification option to "Fit Page."
	40. Make sure "Open Page to" option is set to 1.
	41. Save ppc file.
Compare Cover Files	The cover file in the Requisition folder and on the CD must match exactly.
	42. Check content (title, date, report number) of the cover in the PAG folder against the cover page in the Requisition folder.
	43. Check the cover file for the correct color (PMS 286) (Advanced→Print Production→Output Preview).
	44. Turn off "Spot Color" in separations palette. All elements should disappear.
Burn Prepress files to CD	Three files should be burned to a CD:
	 The ppk file
	 The cover file
	 The PitStop report
	45. Burn all three files to the CD. Verify they open correctly.

46. Copy the ppk file and PitStop report to the PAG folder on the U:Drive.
47. Place the ppk, cover file, and PitStop report in the Prepress_Sweep folder (U:\For Printing\Prepress Documents and Covers\Prepress Sweep).
48. Create a folder with the report number to save the files in.
49. Remove the white cover from the hard copy.
50. Make sure a copy of the blue cover is in the req. folder. This copy can be smaller than original size and printed in black and white.
51. Print ppk file (single sided) and place in req. folder. Remove old laser comps. Hard copy and electronic copy must match exactly.
52. Initial req. folder. Contact PAG staff or PAG manager if the prepress package is incomplete.
53. Deliver req. folder and CD to QA.
54. Note any discrepancies in the ITSM ticket.
55. Close the ticket.

5 CD Creation

PTS creates CDs of GAO products on request from customers. PTS maintains seven (7) CD templates that are used to accommodate these requests. The <u>312CD form</u> is filled out by the customer, with information pertaining to the specific CS project. More information about this can be viewed on the GAO Intranet site, Ordering CDs for GAO Products.

5.1 Initial Contact with Customer

Client Consultation

1. Customers will alert CD Products of a request by email, walk-in, or phone call. Sometimes, they will have already filled out the prerequisite 312CD form and attached it to an email. Other times, they will need to obtain a 312CD form to fill out. Depending on the situation, you will gain some knowledge of the product during this initial contact. Take this opportunity to get informed and obtain what knowledge you can about the product.



(click on the image to download the form)

Regarding images for the CD Product, some customers will request specific images—other than what is set to default—within the CD products splash-page and/or label. This needs to be indicated on the 312CD form. They can choose up to 5 images for the splash-page slide

show or, in place of the slide show, have a static image in the form of a collage. ("<u>Error!</u> <u>Reference source not found.</u>" for more information).

**NOTE: If the customer does choose to have specific images for their product, they must indicate this upon their submission form. If any of the information above cannot be provided at the time of initial request, ask when said information can be provided. Approach the customer in a fashion that lets them understand that to begin the request, all information must be filled in.

2. Based on the due date, and request description, inform the client on what will be achievable within the given amount of time.

**NOTE: Refer to the 312CD form for time estimates.

3. Depending on whether or not contact with customer has been made over email, in person or by phone, one will need to establish contact verification to CD Products. In this email you may want to copy content of <u>CD PRODUCTS INITIAL RESPONSE</u> into your correspondence email, or modify to fit "need-to-know" information.

Given the urgency of the request, the customer will reply within a few hours to a few days. If the customer has not replied and/or provided CD Products with the 312CD form within 2-3 day period, re-establish contact and see if the request is still on.

5.2 Creating and Placing Your CD Products Folder

Once you have received the **CD312FORM.PDF** (312CD form) from the customer, browse to the following location on the U drive <u>U:\Graphic Help Desk\Private\CD PROJECTS</u> and select the appropriate fiscal year folder.

Next, within the appropriate FY folder, create a **new folder** and rename to fit one of the following CD Product naming conventions for the request:

Single report (with or w/o video):

GAO-XX-XXXX; title

Multiple reports (with or w/o video):

GAO-XX-XXXX; title

E-Supplement:

GAO-XX-XXXSP; title - E-supplement

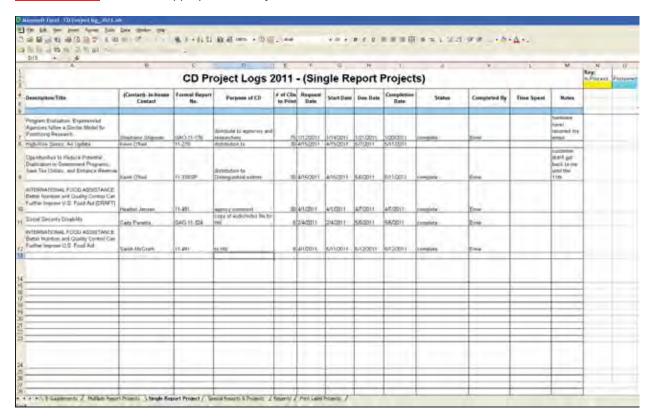
SBU:

GAO-XX-XXX(X); title

**NOTE: It is imperative to be efficient and backup all working files to the U drive. That being said, it is more time efficient to work upon your desktop. At the end of your work session, copy your folder to their appropriate location upon the U drive to safeguard against any potential loss of data to the working machine.

5.3 Documenting Your Newfound CD Request

Browse to CD Project Logs by following: <u>U:\Graphic Help Desk\Private\CD PROJECTS\C1 CD Project Logs</u>. Select the appropriate fiscal year and fill in known values.



**NOTE: The project log is divided into five (5) worksheets depending on the project. Initially define what kind of project and add data to the appropriate cells within the worksheet.

5.3.1 CD Creation Time Estimates

CD Creation Time Estimates	
CD Product	Total time estimate
Single Report CD Multiple Report CD (Compendium: 2-50 Reports)	6 – 10 business days 7 – 11 business days
Multiple Report CD (Compendium: More than 50 Reports)	9 – 13 business days
E-Supplement CD	1 – 5 business days
SBU or SECRET CD	1 - 3 business days
CD Reprints	1 – 5 business days

**NOTE: Compendium projects may be too large to fit on a regular 700 MB, CD-Rs. Single layered DVD-Rs (which boast around 4 GB) can be used in place of the normal CD-R. Inform customer time span may take longer due to extra data being burned. It should be noted that compendium projects MAY BE split into multiple discs.

5.4 Getting Familiar with the Contents of a Folder

Browse to <u>U:\Graphic Help Desk\Private\CD PROJECTS\C3 CD Templates</u>

This directory contains GAO template folders for preparation of CD Products with single report, multiple reports, E-supplements, the annual Appropriations Law Forum template, or SBU projects. Within each parent folder are sub-folders-- with which one should become familiar.

**NOTE: For this specific documentation, COOL layout MULTI REPORT w/ VIDEO template will be used as an example. Other templates will differ in that they might not have certain files/folders mentioned below.

CD folder: **NOTE: The contents of the CD folder is the only folder that needs to be burned onto the finalized CD. It contains all of the files to make the CD product function properly. When adding the contents of the CD to PTPublisher, make sure to NOT include the CD folder, itself, JUST THE CONTENTS.

5.4.1 Individual files:

• <u>index.html</u> - also know as the "splash page", this file will be the initial browserpage when the CD product is accessed.

- search.html contains instructions on how to access PDFs and search for "keywords" within report documents.
- Source.html will list all GAO and non-GAO sources for imagery, and multimedia.
- <u>video_title.html</u> will contain the supplemental video to report Preferred file formats are flv or mpeg4. This page might also contain links to the xml caption file as well as annotated transcripts (txt) files if provided.
- AutoRun.exe an executable file created with program, AUTORUN III. This file
 will automatically launch the index.html page when opened.
- autorun.dat data file. Part of AutoRun batch files.

 Not to be modified after creation
- AutoRunH.dll data file. Part of AutoRun batch files.

 Not to be modified after creation
- AutoRunV.dll data file. Part of AutoRun batch files.
 Not to be modified after creation
- fmodex.dll data file. Part of AutoRun batch files.
 Not to be modified after creation
- mfx42.dll data file. Part of AutoRun batch files.
 Not to be modified after creation
- autorun.inf an information file which provides title text and agency name for launch window when .exe file is run.
- GAO.ico a small Icon image which displays within the My Computer window, indicating CD presence.
- dock.png closed caption icon for JW Player <u>Not to be modified after creation</u>
- controlbar.png closed caption icon for JW Player
 Not to be modified after creation
- captions.swf framework for JW Player. (for video) this is the captions plugin it should be placed in the root directory along with dock.png and controllbar.png

5.4.2 Sub Folders:

- assets contains four different folders and two PNG files:
 - Acrobat imgs:
 - a. acrobatsearch1.png visual directions for accessing the search option within PDF report.
 - b. acrobatsearch2.png visual directions for accessing the advanced search option within a PDF report
 - Bg (Correspond with the chosen "flavor"):

- a. standardbckgrd.jpg blue background for html pages
- b. nuetralbckgrd.jpg gray background for html pages
- c. coolbckgrd.jpg green background for html pages
- 3. Borders (Correspond the "flavor" title with the request):
 - a. b_border.png CSS bottom container image element.
 - b. b border cool.png CSS bottom container image element.
 - c. b_border_neut.png CSS bottom container image element.
 - d. t_border.png CSS top container image element
 - e. t_border_cool.png CSS top container image element
 - f. t border neut.png CSS top container image element
- 4. Logo (One logo from this folder will be added to the splash page to correspond with the "flavor" chosen):
 - a. GAO_cool.png
 - b. GAO_neutral.png
 - c. GAO_standard.png
- 5. classic-map.png
- 6. info.png
- css
 - ☐ galleria.cool.css (corrisponding to the template "flavor")
 - ☐ gao.cool.css (corrisponding to the template "flavor")
- images contains five (5) JPEG images used for the GAO Galleria slide show. For convenience, file names ("1.jpg" for example) should remain the same if alternative images will be used.
- reports This folder contain pertinent PDF report(s) to the CD product (either received by customer or downloaded). These reports will be linked within the index.html page.
- scripts (below are the licensing comments supplied within each individual javascript file at time of download.)

flexcroll.js – "This license text has to stay intact at all times:

fleXcroll Public License Version

Cross Browser Custom Scroll Bar Script by Hesido.

Public version - Free for non-commercial uses.

This script cannot be used in any commercially built

web sites, or in sites that relates to commercial

activities. This script is not for re-distribution.
For licensing options:
Contact Emrah BASKAYA @ www.hesido.com
Derivative works are only allowed for personal uses,
and they cannot be redistributed.
FleXcroll Public Key Code: 20050907122003339
MD5 hash for this license: 9ada3be4d7496200ab2665160807745d"
o galleria-1.2.7.js – "Galleria v 1.2.7 2012-04-04
* http://galleria.io
* Licensed under the MIT license
* https://raw.github.com/aino/galleria/master/LICENSE "
ntipo://raw.gtt/tab.com/aino/gailona/mactor/EloEMoE
o galleria.classic.js – "Galleria Classic Theme 2012-04-04
* http://galleria.io
* Licensed under the MIT license
* https://raw.github.com/aino/galleria/master/LICENSE
o jquery.js - "jQuery JavaScript Library v1.7.2
* http://jquery.com/
* Conswicted 2014 Labor Books
* Copyright 2011, John Resig
* Dual licensed under the MIT or GPL Version 2 licenses.
* http://jquery.org/license
* Includes Sizzle.js
* http://sizzlejs.com/
11(p.//3/2Z/GJ3.0011//

- * Copyright 2011, The Dojo Foundation
- * Released under the MIT, BSD, and GPL Licenses.
- * Date: Wed Mar 21 12:46:34 2012 -0700 "
- jwplayer.js v5.9.2118 "The JW Player is an open-source embeddable media player for web sites, supporting many commonly-used audio and video formats. The player is easy to configure, customize and extend."

(source: http://www.longtailvideo.com/support/jw-player/jw-player-for-flash-v5/15990/about-the-jw-player)

5.4.3 Player Enhancements

Makes HTML5 the default rendering mode on Android devices.

Fails BlackBerry devices over to the download mode, since HTML5 functionality is unreliable.

Added a background skinning element for elapsed/remaining time in HTML5 mode.

Cleaned up the look of the player when loading the preview image and switching to video playback. Player now sets the volume to zero when the user clicks close to the end of the volume slider. When stretching is set to uniform, the player now fills the screen if the dimensions are close enough. The preview image now fades in. Volume level is now saved in HTML5 mode

Added a new API event, onBeforePlay, which fires before the player starts to buffer or resume.

5.4.4 Bug Fixes

Player now ignores the autostart option in iOS, since iOS can't autoplay anyway.

Fixed a bug where shift-tab caused the player to lose focus when using the keyboard to navigate.

Player now gracefully handles empty XML configuration files.

In the "over" state, the controlbar's backgroundcolor is no longer drawn.

Fixed an issue where the player sometimes attempted to load "undefined".

Fixed a bug where calling the playlistItem() API method would fail when called from onComplete event.

Logo linktarget option is now respected in HTML5 mode.

Made HTTP provider consistent in which URL it would use on replay.

Fixed an issue where the controlbar would break in Opera when position was set to "bottom".

In XML playlists, player now uses value set in jwplayer:file instead of media:content if both are present.

Fixed an issue where a bottom-aligned controlbar wouldn't reappear after return from fullscreen.

Fixed an issue which could break JavaScript if the playlist was requested from the JavaScript API.

Now respects the item option in HTML5 mode with external playlists.

The player now prevents setFullScreen() call from JavaScript in Flash mode (since it won't work anyway).

Fixed an issue where both player controls and native controls were visible in fullscreen mode in Safari.

Player no longer throws an error during setup in older versions of Firefox.

Error messages are no longer visible when navigating away to another page in Firefox.

Spaces in metadata field names no longer cause JavaScript errors.

Fixed a bug where getPlugin('display').onHide/onShow events were firing backwards.

The preview image is now displayed if load() is called from the JavaScript API while player is idle.

In HTML5, dock button icons are now centered.

The player now gracefully handles skins where the playlist component has been completely removed.

The onComplete event no longer fires several times if multiple players are instantiated on a page.

(source: http://www.longtailvideo.com/support/jw-player-for-flash-v5/17682/jw-player-release-notes)

- swfobject.js "SWFObject v1.5: Flash Player detection and embed http://blog.deconcept.com/swfobject/
- * SWFObject is (c) 2007 Geoff Stearns and is released under the MIT License:
- * http://www.opensource.org/licenses/mit-license.php "

5.4.5 Videos

- - captions.swf enables xml files to translate to captions in JW player (no mods required)
 - Captions_name-of-file.xml captions for video. File will need to be changed in source code for each different project. Will receive from Video group
 - name-of-file.flv video that will be given by Video group
 - name-of-file Still.jpg poster (still) image to show in player
 - transcript.txt 508 compliancy file. Annotated transcript of video.
 - player.swf JW Player required to play video within non-Flash free, non-HTML5 compliant browsers (ala IE8-)

**NOTE: Any video will be created by the Web Content and Electronic Media staff (7th floor; Manor or Perkins), and transcripts will be completed by Carole Pattie. Locate the transcript at the following location on the U drive:

U:\Web Posting\Intranet Sweep Special Projects

5.4.6 Read Me Files

 READ ME files - contains READ ME.docx which will be modified for purpose of CD Product and then saved within the CD folder

5.4.7 Documentation folder

**NOTE: This folder will contain all or some of the files mentioned below.

- 1. CD312Form.pdf
 - a. This form will be emailed by the customer, or point of contact from team or project, to CD Products. Sometimes the form is printed out and given by hand. Changes to the form might occur from day 1 up until the final due date—this is normal.
- 2. Cover art provided by customer (if applicable)
- 3. Report(s) provided by customer
- 4. E-mail traffic (if applicable)

5.4.8 Label folder:

Below, you will see an image of all the files within the "Label" folder. These files comprise the label template and should only be altered under project oriented circumstances only.



Within the Label assets sub-folder:



**NOTE: Each GAO logo (PNG file) corresponds with each "flavor" of Sure Thing CD label (STD file). When constructing the CD label proof, within SureThing, be aware that the GAO logo (PNG file) on the label will be one of these contained PNG files.

5.4.9 PSD and Al folder

All your source Photoshop and Illustrator files (not relating to the CD label) will be stored here. Individualized folders have been provided for the background splash page(s), splash page "wrappers" (curved edges on top and bottom of splash page), and the Galleria "info" and slide show symbols—to make it easier to export and replace assets for different "flavored" projects.

- 1. Copy the template folder corresponding to the type of CD product being created.
 - **NOTE: The files on the server are (Read-Only) locked to prevent corruption of templates. Remember to unlock the files before you begin editing.
- Browse to U:\Graphic Help Desk\Private\CD Projects and open the folder directory for the
 current Fiscal year. For example, if the CD is for fiscal year 2013, open the 13 folder. Next,
 select the numbered folder which best refers to the project Paste the template folder within
 and rename it using the report number and title provided within the 312CDform.pdf
- 3. Save all reports to the "reports" folder. (The term "reports" refers to any document that is to be included as CD content: PDF, PPT., XLS, or HTML files) with the exception of video files and other supplemental multimedia. Use common judgement.

5.5 Setting up the HTML files

5.5.1 Preparing the index.html file

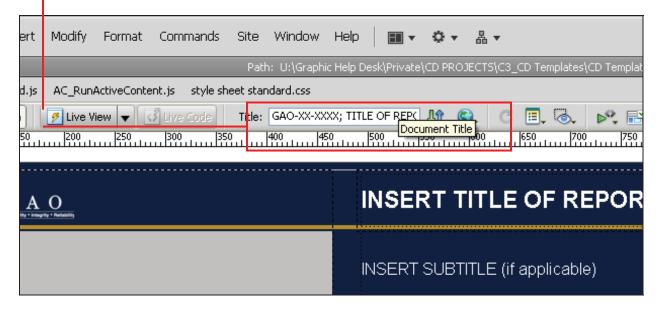
- 1. There are seven (7) different templates to accommodate various project requirements.
 - 1. CD Template single report
 - 2. CD Template single report wVIDEOS
 - 3. CD Template multi reports
 - 4. CD Template multi reports wVIDEOS
 - 5. CD Template SBU template
 - 6. CD Template Appropriations Law Forum
 - 7. CD Template E-supplement

For single and multi-report templates, there are three (3) different cascading style sheets (gao.cool.css, gao.neutral.css and gao.standard.css) from which to choose. Upon request or at the designers discretion, choose one.

**NOTE: Only one (1) cascading style sheet may be used for one project at a time. No mixing it up.

2. Locate the *files* tab on the right-hand side of the Dreamweaver workspace. If it is not open, select *Window* > *Files* to unhide it. Twirl down the project folder, and the CD folder in the files pane, and locate index.html. Double-click the file to open it in Dreamweaver.

3. Highlight the Document Title text field, located at the top of your open page within Dreamweaver, and replace it with the **Report number**, semicolon (;) followed by the **Report Title**.



- 4. If there is a subtitle in the report name, change that as well; if not, delete the subtitle text.

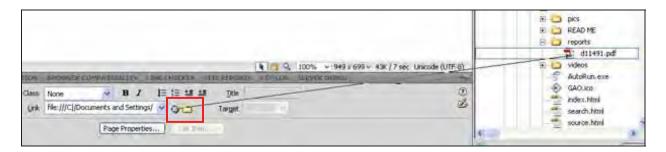
 **NOTE: Don't' forget to save your document periodically.
- 5. Add the GAO report title(s) to the index.html page. Highlight the filler "Report Title" and update with the actual report number. For multiple reports, highlight the 'GAO-XX-XXX & Related reports' text and replace with their corresponding numbers.

**NOTE: Make sure to use the title provide to you within the 312CDform.

- 6. If asked by the requester, research and <u>download</u> essential report(s) from the GAO website If the report(s) are restricted, Sensitive but Unclassified, or cannot be found on the web, the customer will then need to personally provide the report(s) to the designer.
- 7. Once the reports have been saved within the "reports" folder, they can then be linked within the index.html page in Dreamweaver.

5.5.2 Hyper-linking files in the index.html page

- 1. In the "file" pane, twirl down the "reports" folder to reveal the report documents.
- **2.** Make sure that the Properties panel is visible at the bottom of the Dreamweaver workspace.



3. Highlight the report text on the page. Next, click and drag the rubber band icon -- stretching it across the window -- to the report name in the reports folder. Once the mouse is over the appropriate report, release the mouse, thus selecting your target document.

NOTE: You can also link the file by manual navigation if you click on the folder icon after you highlighted the targeted text, then locating the target file.

- 4. Save the document.
- 5. On the same menu bar that contains the options for viewing the Workspace (i.e. Code, Split or Design), is a Globe icon. Select this icon, and view the web page in a browser. Check that each of the following links works correctly:
 - Visit gao.gov (links to http://www.gao.gov)
 - Search Instructions (links to search.html within the CD folder)
 - Get Adobe Reader (links to http://get.adobe.com/reader/)
 - Home (links to the index.html page)
 - Source (links to the source.html page)

5.5.3 Preparing search.html file

- 1. Double-click **search.html** in the "file" pane to open in the main window.
 - **NOTES: Thankfully, the "search" page is, pretty much, a no-need-to-edit page. You will need to, however, change the report name and number to reflect the project, as well as any specific photos added to the request form.
- 2. Change the title and report number, then review the page within Internet Explorer...



**NOTE: The page should look something like the image above.

3. Save the page and then you are done.

5.5.4 Preparing sources.html file

- 1. Click **source.html** in the "file" pane to open it in the main window.
- 2. Replace the Document Title text with the **Report number**, semicolon (;) then **Report Title**, as did before with both **search** and **index** html pages.
- 3. If the project uses graphics other then the GAO images in the standard template (splash page OR label), and the image library was used to locate these graphics, **be sure to source where the image was acquired.**



When sourcing the CD label or any multimedia within the project, your source.html page then might look like something above.

**NOTE: Since the last version of CD products templates, sourcing for images is now inserted within the source code of each html page that has the galleria.

4. The html code below is the syntax for how images display within Galleria:

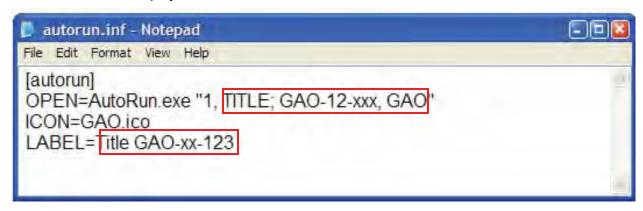
```
<div id="slideshow">
<div id="noscript"><img src="images/1.jpg" width="375" height="375" alt="" /></div>
     <div id="wrapper">
      <div class="content">
                        <!-- Adding gallery images. We use resized thumbnails here for better performance, but it's not necessary -->
         <div id="galleria">
                        <a href="images/1.jpg">
                        <img src="images/1.jpg" width="375" height="248" data-description="&nbsp; source: GAO &nbsp; &nbsp; "/></a>
                        <img src="images/2.jpg" width="375" height="375" data-description="&nbsp; source: GAO &nbsp; &nbsp; "/></a>
                         <a href="images/3.jpg">
                       <img src="images/3.jpg" width="375" height="246" data-description="&nbsp; source: GAO &nbsp; &nbsp; width="375" height="246" data-description="%nbsp; source: GAO &nbsp; &nbsp; width="375" height="375" height
                       <a href="images/4.jpg">
                       <img src="images/4.jpg" width="375" height="246" data-description="&nbsp;source: GAO &nbsp;&nbsp;"/></a>
                       <a href="images/5.jpg">
                        <img src="images/5.jpg" width="375" height="375" data-description="anbsp;source: GAO anbsp;anbsp;"/></a>
 </div>
</div>
</div>
</div>
```

Figure 1: Note the contents within "galleria" div.

5. Make ant necessart changes accordingly. Preview the pages in Internet Explorer. Save the file.

5.5.5 Setting up the Autorun.inf

1. Double click the autorun.inf in your CD folder. Change both areas (indicated below) to accommodate the project.



5.5.6 Setting up the README.PDF file

Locate the **READ ME subfolder** within the **CD folder**.

The MS Word.doc within contains important information regarding the CD product itself, as well as the reports and multimedia contained,. (ie: copyright notice, plug-ins needed to view reports or video, whether the CD is LOUO, FOUO etc)

Make any necessary changes to the Word doc (corresponding with the "Level of Classification" notice provided on the 312CD form) then export the .doc as a PDF.

Save as **README.PDF** as a loose file within the **CD folder**. Before burning the CD, double-check to make sure the contained hyperlinks work properly.

**NOTE: The outlined box below contains the Level of Classification text. Depending on level of classification given per CD request, text may be subject to change.



This CD is LIMITED OFFICIAL USE ONLY - Releasable Only to Congress and Cognizant Federal Agencies

This CD is FOR OFFICIAL USE ONLY - Releasable Only to Congress and Cognizant Federal Agencies

This product is temporarily restricted pending official public release

If this CD does not launch automatically, double-click My Computer and right-click the CD icon to open a context menu. Click Open and double-click index.html to open the CD.

You must have Adobe Acrobat, or Reader, to view the contained PDF documents.

(Download Adobe Reader)

You must have Adobe Flash Player to view the contained multimedia. (Download Adobe Flash Player)

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

5.6 Substituting Slide Show images or Replacing with an Image Collage

If the client decides sliding imagery isn't necessary for the splash page, a collage (static image) can substitute. The customer may already have images in mind-- in which case make sure they are all JPEG, of similar dimensions and of decent resolution.

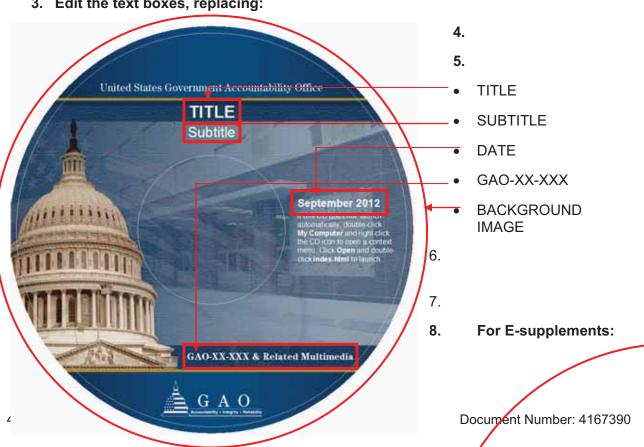
If the customer needs images pertaining to a specific topic, refer to the image database. Replace the new images within the "images" folder and rename them 1-5 accordingly.

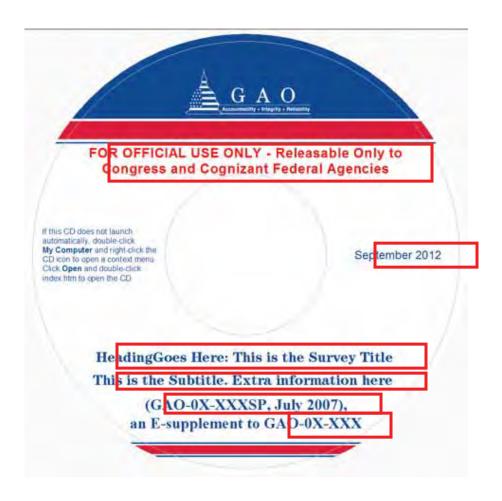
5.7 Labeling the CD with SureThing 4 or SureThing 5

- 1. *PREFACE: The number of CDs will determine which version of SureThing should be used for the project. If a large request for CDs comes in, create the label as SureThing 4, and send to hardware break-fix. Hardware (the group designated to print large CD requests) cannot print SureThing 5 labels due to antiquated software. The Bravo II printer in cube 11 can print out SureThing 4 AND SureThing 5 labels, the only difference is that PTPublisher will display the preview of a SureThing 5 label and not a SureThing 4 label.
- 2. Browse to the Label folder, within your CD Project folder, and open template file, **Label.std** with the appropriate SureThing program.

**NOTE: Special labels are located U:\Graphic Help Desk\Private\CD PROJECTS\C3 CD Templates\Label Templates-Ready made labels

3. Edit the text boxes, replacing:

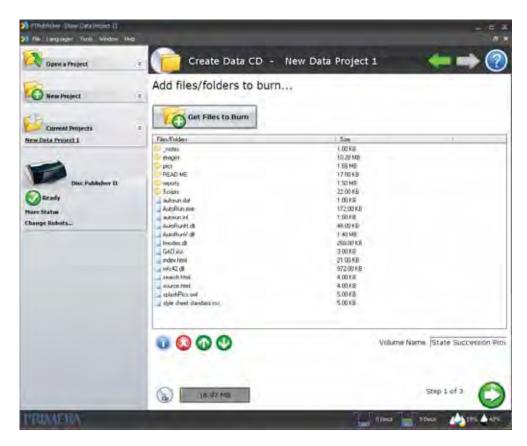




5.8 Burning a CD with PTPublisher Bravo II CD Printer

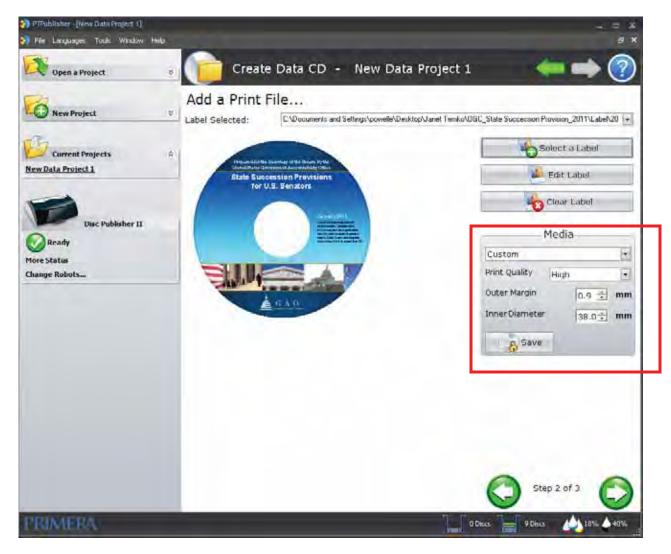
PREFACE: PTPublisher is very user friendly with an easy to navigate GUI. Use these guidelines to help if needed.

- 1. Make sure that the Bravo II is on and initiated.
 - a. Unplug the cord in the back of the printer marked with the blue tab, and then plug it back in.
- 2. Open **My Computer** and verify under **Devices and Removable Storage** that the printer is being recognized. You should see:
 - a. DVD-ROM Drive (E:)
 - b. DVD-CD ROM Drive (R:)
- **3.** Right-click on the PTPublisher icon on the desktop, and select "Run Elevated" to open the program. If the user does not select "Run Elevated", the CD burner will not be recognized
 - **NOTE: User will have to force quit the PTPUBLISHER.EXE program several times from within task manager before the next, correct attempt can be made. That is why it is important to select RUN ELEVATED from the starting gate.
- **4.** A popup window should now display. Choose *Data Project*, if you are printing both data and a label. OR choose *Print Project* if you require only labels and the contents of the CD or DVD are on the medium.
- **5.** Create Data DVD or Create Data CD will appear... choose wisely.
- 6. Click Get Files to Burn Step 1 of 1



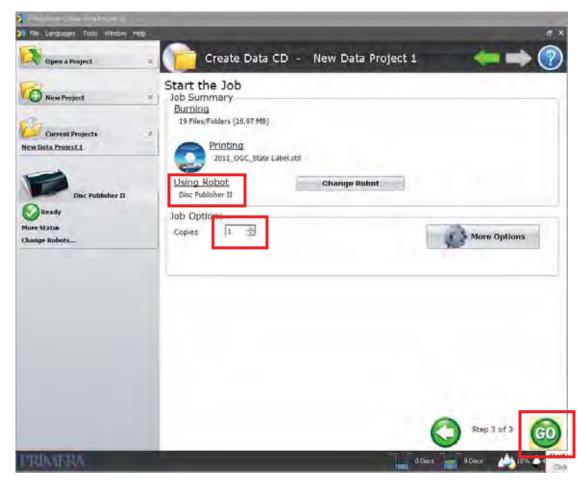
- Navigate to your project files and select all of the files within the CD folder (not the CD folder itself).
- 8. Click Add file to Project and then Done.
- **9.** In Step 2 of 2, Add a Print file, click the Select a Label button, and then navigate to the appropriate SureThing label saved within the Label folder. Select it and then proceed to the next and final step by pressing the bottom right arrow.

**NOTE: If workstation label printing begins to glaringly "offset" in relation to the white space on the CD-R, make sure that the media print margins are set to the proper measurements (in millimeters), as seen in image below:



**** IMPORTANT NOTE: For smaller, inner margin, blank CDs, set outer margin to 1.5 mm and inner margin to 23.9 mm.

- 10. Within Step 3 of 3, make sure that the unit robot name on display is "Disc Publisher II".
- 11. Select the number of copies you will need to print in order to fulfill your request,
- **12.** Save your PTPublisher job file into the first working project subfolder for archive (File > Save Project As...)



13. Finally, click the GO button to begin your print.

5.9 Verification of the Prototype

To verify that the prototype is acceptable, be sure to get an endorsing signature from a peer reviewer via the 312CD request form, along with any notable comments. U:\Graphic Help Desk\Private\CD PROJECTS\C01_Correspondence_checklists

Once the prototype is approved with this required documentation, the remaining CDs can be produced.

5.10 Completing the CD Project

- 1. Place the CDs within the "clam shells" located in front of John Miller's office. Once complete, contact the POC and notify them that the order is available for pick up/or delivery.
- 2. If time and materials permit, print off an extra copy of the project and store within the file cabinet.
- 3. Have the POC sign the request form upon receipt of the completed product.

4. Open U:\Graphic Help Desk\Private\CD PROJECTS\C1_CD Project Logs\CDLogs\ and fill in the remaining information for this CD in the appropriate FY spreadsheet.

5.11 Setting up an SBU project folder

PREFACE: The folder for SBU project witll be located upon the U drive: U:\Graphic Help Desk\Private\CD PROJECTS\C3 CD Templates\SBU template

Copy and paste the template into the customers working folder, not forgetting to unlock the READY ONLY property for editing purposes.

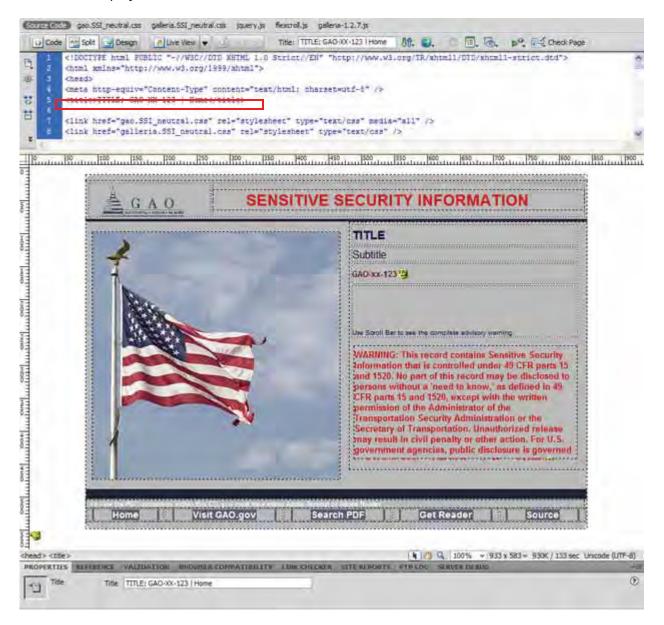
**NOTE: If the document is an SBU project, the files have to remain password protected and the Teams will have to provide the recipients of the CDs with the password by other means (thumb drive, etc.) The CD content will be stored on the CD Tower in the SBU CDs folder on the desktop. Never under any circumstances should the SBU document(s), for which the products are made, be uploaded to the U drive or network. The document should be kept for three (3) days after the completion of the project, before it is to be removed from the corresponding project folder and securely discarded in the recycling bin.

If a reprint request for a "sensitive" CD comes in, the client will have to provide the password protected PDF once again. PTS is able to print LABELS ONLY for Classified CD products as well.

5.11.1 (SBU) Setting up the index.html file

In Dreamweaver, open up the index.html file from the customers working SBU folder.

Begin by changing the title text, within the head area, of the source code, to reflect the name and number of the project.



The background image, on the splash page, is to remain "GAO neutral gray". Unlike the previous CD product templates, where there is an option of three color choices, this strict adherence to a single tone is for the sake of the red warning text at the top of the splash page. This warning text is to remain the same color and size, however will adjust accordingly with the marks on the report of each request.



Same as the warning text at the top, the scroll bar area text should also reflect the marking of each respective request.

Edit the fields according to the project specifications, keeping in mind the special markings coinciding with the report and making sure that both the report and splash page have the same markings.

**NOTE: To better understand the markings and meaning, read pages 17 and 18 of the <u>GAO Directive 0910.1-03</u>. Whichever warning label is indicated on the report must also be on the splash page and CD label. If report is not available, please ask customer to advise. If there is an FOUO and an SSI on a single report, the SSI will go on the label and splash page. This is because within GAO's Information Security Requirements for Sensitive Information (0910.1-03; C2) any marking governed under US law, containing legal codes (ie: U.S.C 94-163, 89 Stat.958, 42 U.S.C. § ...) within the marking, will have legal precedence over any other marking without. If clarification is needed, or confusion as to which code to use arises, contact Information Security for assistance.

Again, if any further questions persist, regarding special markings for your product, you may contact any one from GAO's Information Security department (IO).

Dolores McGhee

John F. Drewery Jr. (Jay)

Justin Schnare

5.11.2 (SBU) Preparing search.html file

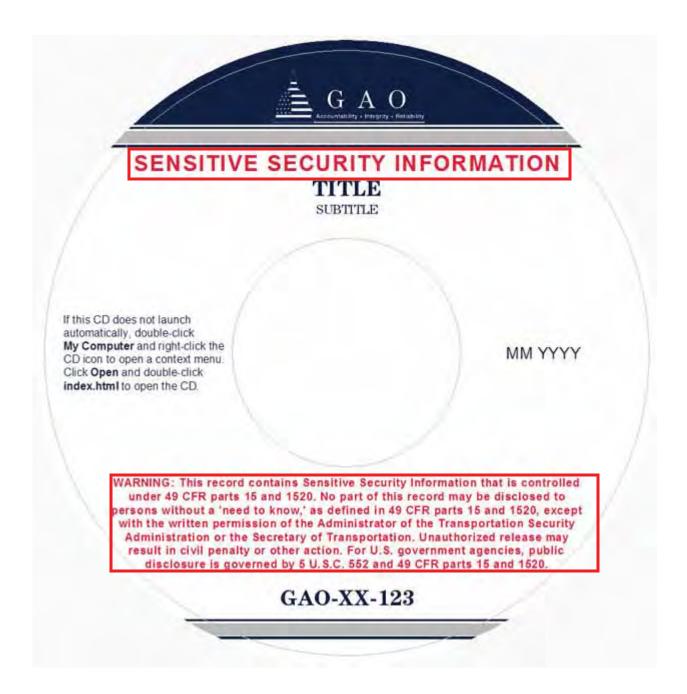
Change the title and report number, then review the page within Internet Explorer.

5.11.3 (SBU) Preparing sources.html

- 1. Begin by changing the title source code to reflect the name and number of the project.
- 2. The sourcing will look differently than normal source due to the fact that a copyright notice is no longer present. This is because the SBU reports will not be made public, and the rules and regulations therefore go to the special markings and the warning information they provide.
- 3. Make sure that if you print the CD, that the customer has their report password encrypted. Talk to the customer to make sure that this is what they want. Also to make sure NOT to place the SBU report within the U drive.
- **4.** Three working days, after final CD products are given to customer, if they have not received a request for more CDs, place the project (SANS REPORT FILE) within the D drive in the respective location (D:\SBU CDs) and then securely delete the report from the working folder upon your desktop.

5.11.4 (SBU) Preparing labels

When printing the SBU label, follow the standard operating procedure for labels below (Request for Labels). Below is an example of the SBU label.



**NOTE: the special "warning" markings at the top and bottom. These will change with each project.

5.12 Requests for Reprints

When a request for reprints arrives proceed with the following:

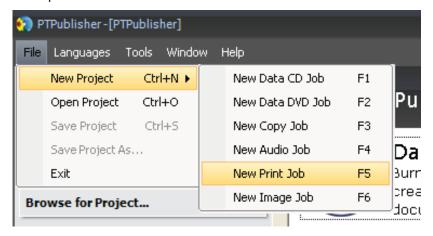
- 1. Send the client a 312CD form. If the request is a straight pickup from previous job, fill in the form and mark the log in sheet with the job information. Indicate that it is a reprint, and indicate how many CDs. If it's a larger job, contact hardware. Inform them that a large number print job will be arriving. Send hardware recipient the SureThing Label (.STD file) via email.
- 2. Once printed, have the client sign that CDs have been picked up.
- **3.** File the paperwork in the file cabinet in its appropriate folder.

**NOTE: If it is a reprint request with a change, please send a new 312CD form to have the client fill out the new information. Indicate that it's a reprint with a change. You can make a revised folder of that job on the U: drive to keep the two separate. Follow instructions above.

5.13 Requests for Labels

If the customer requests labels only, follow the steps below to address the job:

- 1. Send the client a 312CD form. If the request yields higher than 25 labels, contact Hardware Break-fix.
- 2. If the label request is a reprint with a change, send a duplicate of their initial 312CD form and have them indicate the new request as a reprint with change. You can make a revised folder of that job on the U drive to keep the two separate. Follow the previous **NOTE instructions.
- 3. Next, turn on the Bravo II CD printer by pressing the second button on the top, next to the lid. Wait until the printer initializes before attempting use. (green lights will stop flashing.)
- 4. Load CDs into the right-hand bin, (up to 23 individual CDs) and then close the lid.
- 5. Edit your CD label from within your CD Project folder.**NOTE (refer to page 27 regarding editing SureThing labels)
- **6.** Save the label
- 7. Open PTPublisher and select New Print Job



8. Next, select your STD label file and then proceed to indicate how many labels you will need.

5.14 Request for Secret Labels

If the customer requests Secret labels made, follow the steps below to address the job:

Like a normal CD product, take any pertinent information, regarding the project, upon first contact. Normally, if not always, the customer will want to have only the labels printed for the report. This is due to the "secretive" nature of the report and is to be understood as normal.

After receiving the 312CD form via the customer, create a local folder for the customer.

Locate the secret label template folder: <u>U:\Graphic Help Desk\Private\CD PROJECTS\C3 CD</u> Templates\Label Templates-Ready made labels\Ready Made Labels\SecretLabels

And copy and paste the folder into your customer's folder, not forgetting to unlock the READ-ONLY property for editing purposes.

This customer folder will now contain:

- The Documents folder with secret labels and the 312CD form.
- The Label folder with the Secret label template file(s)

The brilliant thing about the secret labels is that they are an effortless template;

You open the label in SureThing 5, change the information on the template to reflect the information on the request form:



- 1. Classified By
- 2. Reason number
- 3. Declassify On

Number the discs individually in the field provided. You will save each numbered label individually within the Labels folder. Print the exact amount of products, **DO NOT** print extras. Save your working files onto the U drive CD products folder-- in the appropriate location and PRESTO you are done.

**NOTE: SureThing 5 will primarily be the version to use when creating the labels as there are usually less than 35 secret CDs to be printed for the customer.

Lastly, be sure to **change the warning text** on the label of the CD to cater the same warning within the project's document.

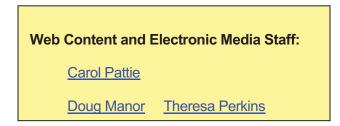
5.15 CD Products Containing Video and Multimedia

1. Adding video & annotated transcript



Note: If a video comes without the "closed caption" xml files, type notification underneath the video: "Closed captioning not provided for this video"

2. The video will be placed into a stand-alone page in the CD template. The video (.flv), the preview (.jpg or .png), the text file (.txt) and closed captioning (.xml) files must be collected from the U: Drive. Web Content and Electronic Media staff can assist with this process if the files are not present at time of CD creation. These files are then linked to a player file and a closed caption plug-in created through the code written in the CD template. It is important to note the files must be placed exactly according to the instructions to ensure correct functionality of the finished CD.



Web Content and Electronic Media Staff are available to provide working files for CD production, for example if the CD is going for agency review or if restricted. Carol Pattie is in charge of finalizing **annotated text transcription** and would be primary contact for such, while Doug Manor and Theresa Perkins handle video editing and conversion.

5.15.1 Getting Familiar with the Contents of a Product Containing Video and/or Multimedia

CD Product templates, which display video and multimedia, were created basically identical to templates which don't display video and multimedia. In exploring the contents of a folder (single report, or multi-report) one will notice that the addition to the multimedia templates are in the **Videos subfolder** (located within the **reports folder** of the parent **CD folder**)

5.15.2	Video & Multimedia - Required Files
	flv - (file that contains the actual video in Flash format
	 Acquire Location:
	 U:\Web Posting\Intranet Sweep Special Projects\GAO-yy-xxxx
	o Deploy Location:
	U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD\videos
	•jpg or png - (file that contains the actual preview of the beginning frame of the video)
	 Acquire Location:
	 U:\Web Posting\Intranet Sweep Special Projects\GAO-yy-xxxx
	Deploy Location:
	U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD\videos
	•xml - (File that contains the closed captioning code)
	 Acquire Location:
	 U:\Web Posting\Intranet Sweep Special Projects\GAO-yy-xxxx
	Deploy Location:
	U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD
	•txt - (Transcript of the video)
	 Acquire Location:
	 U:\Web Posting\Intranet Sweep Special Projects\GAO-yy-xxxx
	player.swf - (an open source video player)
	o Location: already placed
	U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD\videos

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caption.swf – (enables the captioning process)

Location: already placed

U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD\videos

- controlbar.png -
 - Location: already placed
 U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD
- · dock.png -
 - Location: already placed
 - 1. Note: All the files that need to be in the videos folder (*U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD\videos*):
 - captions.swf
 - captions.xml
 - video.flv
 - still img.jpg
 - transcript.txt
 - player.swf

The **controlbar.png** and **dock.png** need to reside together at the same folder level as the **.html** page they are loaded into:

U:\Graphic Help Desk\Private\CD PROJECTS\ FYxx\"project folder"\CD

U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD

5.15.3 Accessing and Setting up Video Files

- 1. Copy the **flv**, **xml**, **.jpg and txt** files from the *U:\Web Posting\Intranet Sweep Special Projects\GAO-yy-xxxx*, location and place them into, *U:\Graphic Help Desk\Private\CD PROJECTS\FYxx\"project folder"\CD\videos*.
- 2. Open video_title.html from your project folder in Dreamweaver. View the source code And replace the information outlined in the photo below:

```
<div id="container">
     <div id="videobox">
     <h4 class="bodytext">JavaScript is currently disabled in your browser and is required to run Flash Player. <br />
     <br />
    If JavaScript is enabled, download a newer version of Adobe Flash Player.</h4>
              <a href="http://www.adobe.com/go/getflashplayer">img src=
     "http://www.adobe.com/images/shared/download_buttons/get_flash_player.gif" alt="Get Adobe Flash player" width="112" height=
     "33" /×/a×/p>
     </div>
55
56
          var so = new SWFObject('videos/player.swf' 'ply','375','229','9','#fffffff');
          so.addParam('allowscriptaccess','always');
so.addParam('allowfullscreen','true');
          so.addParam('wmode','opaque');
so.addVariable('file','CBF.flv'); //the flv is actually located in the videos directory although it appears to be in
     the root here
     so.addVariable('image','videos/BP_Still.jpg'); //the preview image
     so.addVariable('autostart', 'false'); // change to false if you don't want the wideo to autostart
          so.addVariable('plugins', 'videos/baptions.swf'; //this is the captions plugin it should be placed in the root
     directory along with dock png and control
         so.addVariable('captions.file', 'videos/daptions CBP.xml'); //documentation on the captioning plugin can be found
     here: http://www.longtailvideo.com/support/addons/captions-plugin/14974/captions-plugin-reference-guide
           so.addVariable('captions.state', 'true'); //whether to show the captions on startup or not. The default is true
           so.addVariable('captions.back', 'true');
          so.addVariable ('captions.fontsize', '14'); //The base size of the captions text in pixels. Is 14 by default. This
     fits about 80 characters per line, just like with TV / DVD
          so.write('videobox');
        </SCRIPT>
```

3. Open the annotated transcript text file and use the info . Copy and paste the information provided in the transcroll div provided. Use the title and description for the title and subtitle:

```
<div id='transcroll' class='flexcroll'>
      <span class="bodytext"><br />
      From the U.S. Government Accountability Office, www.gao.gov
      <br /><br /></pr
     Related GAO Work: GAO-12-551,<strong> Antidumping and Countervailing Duties: Management Enhancements Needed to Improve
     Efforts to Detect and Deter Duty Evasion</strong><br />
     Released: to agency for comment April 20, 2012
     <br />
98
99
100
     <br />
     [First Screen] [Silence]
     <br />
     <br />
     This video is part of a GAO report:
     <br />
     <br />
     Antidumping and Countervailing Duties: Management Enhancements Needed to Improve Efforts to Detect and Deter Duty Evasion
     (GAO-12-551)
     kbr />
     <br />
     [Second Screen] [Silence]
     <br />
     kbr />
     The content of this video was produced by U.S. Customs and Border Protection without GAO involvement. The statements in
      this video are not representative of GAO.
     <br />
     >> Items like steel wire hangers, threaded rod, nails, and even honey are just a few of the traditionally American-made
      products that are now being produced overseas and sold in the U.S. at artificially lower prices and often inferior quality.
      Unfortunately, foreign importers have been using illegal and fraudulent ways to avoid paying the antidumping and
      countervailing duty fees on these products. The antidumping and countervailing duty fees are additional duties importers
     are required to pay in order to import these types of products into the U.S. This additional duty is designed to protect
      the American worker when foreign goods are artificially priced lower than their fair market value. These additional duties
      help level the playing field for American-made products.
     </span>
<br />
      </div>
```



**Note: If the video does not require an annotated transcript, then note in the source code:

"Annotate Transcript with description text not provided for this video"

**Note: If a video comes without the .txt files, and you know there should be one, contact Carole Pattie.

5.16 Creating E-Supplements

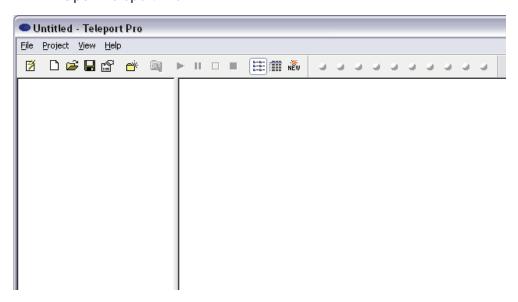
5.16.1 E-Supplement CD folder Structure

- 3. "What is an E-Supplement?" An E-supplement is an online survey, produced for agency comments, prior to the release of a report to Hill requesters.
- 4. In the template folders (<u>U:\Graphic Help Desk\Private\CD PROJECTS\C3 CD Templates</u>) open your E-supplement folder.

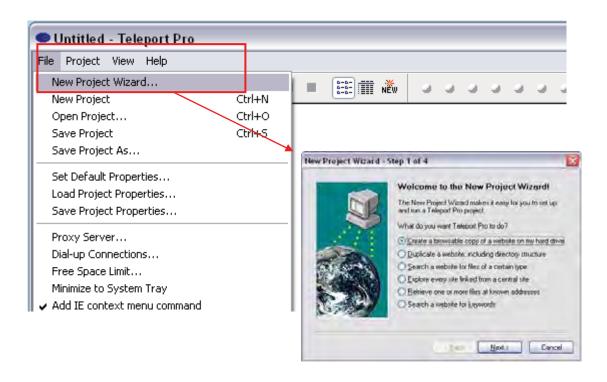
Below is what the folder contents should look like:



- 5. Within your 312CD form, or over email, you should have received the URL for the E-supplement. We will now take this URL address and grab a copy of the site, to put on a CD, using Teleport Pro.
- 5.17 Create a New Teleport Pro Project with the Project Wizard.
 - 1. Open Teleport Pro.



2. On the main menu, click File > New Project Wizard.
A Project Wizard Panel Appears.



3. Under "What do you want teleport Pro to do," click the radio button for the options which reads "Create a browsable copy of a website on my hard drive".

Then, click Next.



4. Enter the E-supplement URL where indicated under "Starting Address". This URL should be provided by the customer.



5. Enter **3** for the number of links to explore from this starting point. Click **Next**.



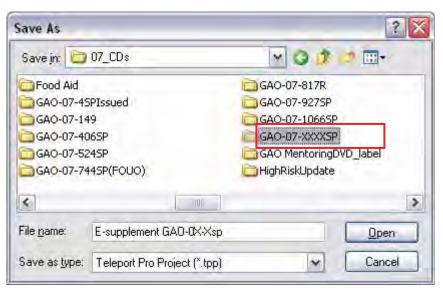
6. Under Project Properties, make sure the radio button for the option "**Everything**" is selected. Leave the Account and Password blank. Click **Next.**



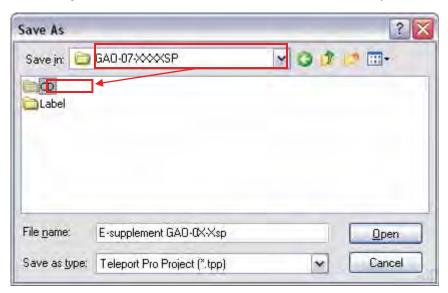
7. "Congratulations" appears. Click Finish.



8. Locate the E-supplement project folder you created.



9. Open the folder, double-click the CD folder to open this directory.

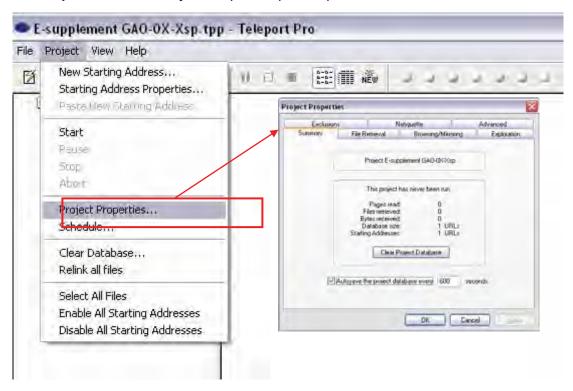


10. Lastly, save the project within the CD folder.

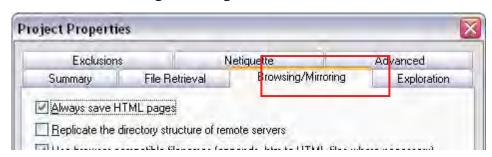


5.17.1 Adjust Project Properties in Teleport Pro

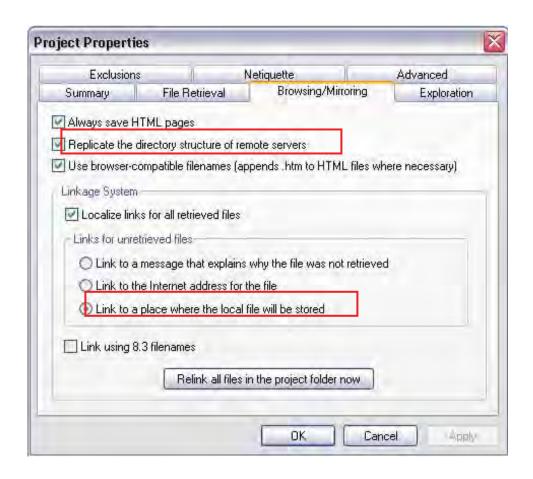
 On the main menu of the Teleport Pro project window, click Project > Project Properties... The Project Properties panel opens.



2. Click the **Browsing/Mirroring** tab.

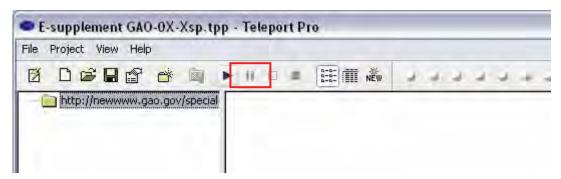


3. On the Browsing/Mirroring tab, check the box to "Replicate the directory structure of remote servers". Beneath "Links for unretrieved files", click the radio button to "Link to a place where the local file will be stored". Click OK to accept the settings and close the panel.

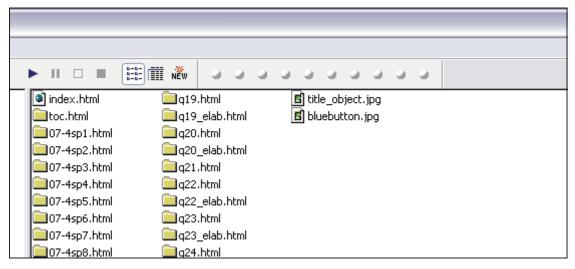


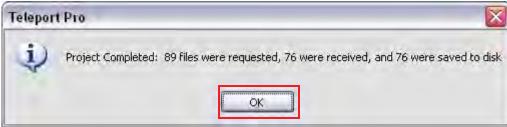
5.17.2 Copy the E-Supplement Survey Files

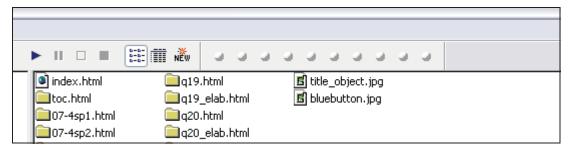
1. In the main project window, select the play button (arrow pointing right) to begin copying the files. Save the files to the CD folder (by selecting the CD folder) in the Save dialog box. It will save another .tpp file. Again, take the .tpp file out of the CD folder and place in into the parent folder with the CD and Label folders. The files should appear in the right window as they are copied to the project folder.



2. When the Teleport Pro message appears, reporting results of the download, click Ok.







- 3. Test the mirrored site. In the main project window click on **index.html** to open the survey home page in a browser window.
- 4. Close the browser and close Teleport Pro.

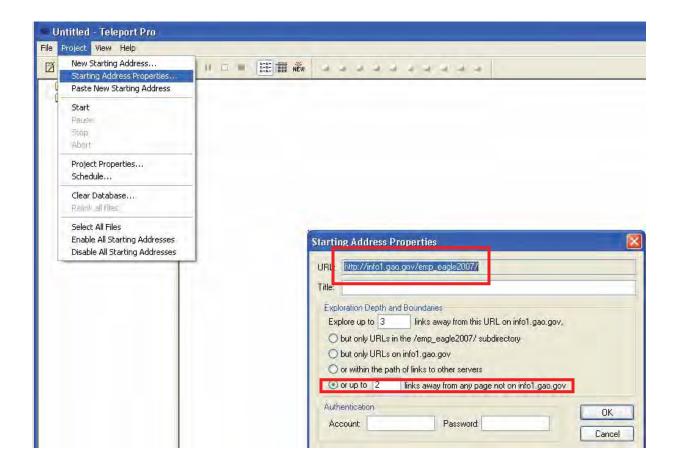
5.17.3 Using Teleport Pro to Grab Files from Multiple Servers

**NOTE: This procedure is rarely used. Only under occasions when customers ask for archiving URLS is when one will expect to use this procedure.

Follow the same steps as in "Create a new Teleport Pro project with the Project Wizard"

Only now, once you have set all the previous "project properties" navigate to "Starting Address Properties..."

and then within the popup browser window, select the following as displayed within the red boxes below:



**NOTE: There will be a lot of folders and files, pulled from the web, that may not pertain to your project. This will create huge folders of data, and may require a DVD-R rather than a CD-R.

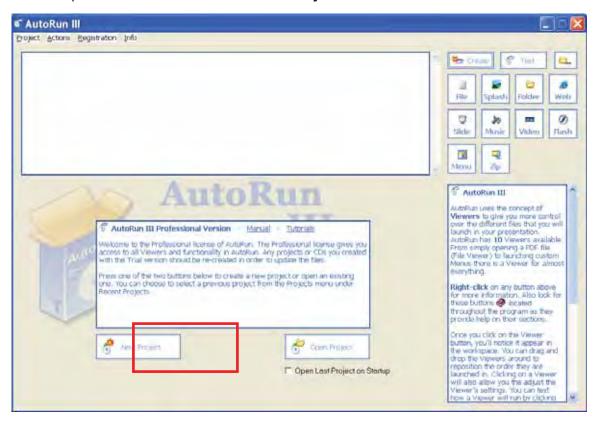
5.18 Setting the E-Supplement CD to AutoRun

**NOTE: If Typhoon AutoRun is ever to be reinstalled on an updated machine, make sure to re-register the program with the appropriate serial number. For that, please reference to the following document:

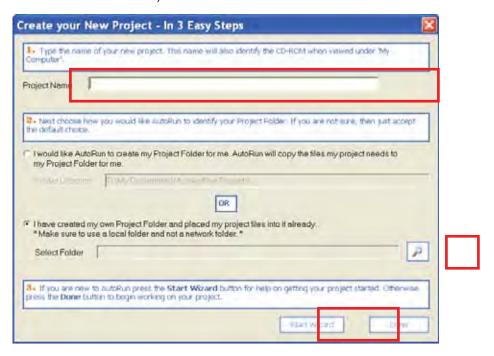
PTS Supported Software Serial Numbers (DM #3401930)

Failure to register within thirty (30 days) from initial Auto Run installation date will disable the automatic boot up feature from CD products on OTHER PCs.

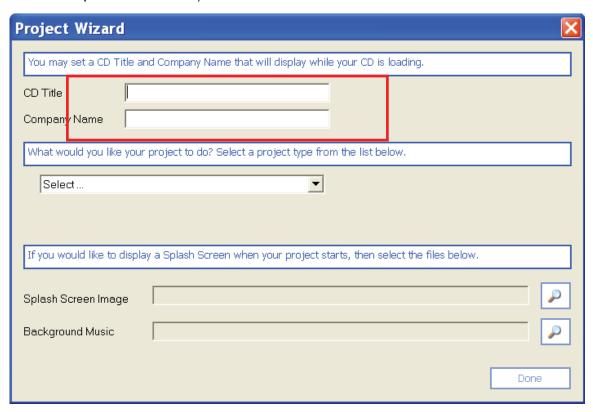
1. Open AutoRun III. Select the New Project button.



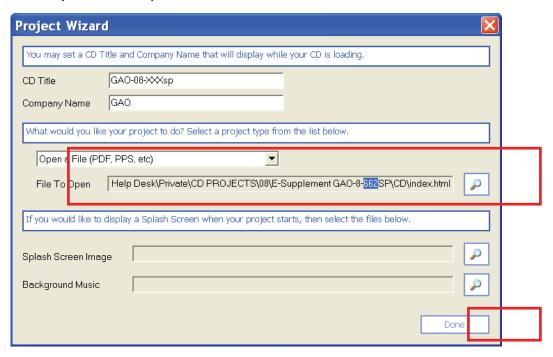
2. Fill in the **Project Name** (E-Supplement GAO-08-XXXSP) and **Click on the magnifying glass** next to Select Folder. **Navigate to the folder** on the U:Drive (E-Supplement GAO-08-XXXSP\CD) then **select Start Wizard**.



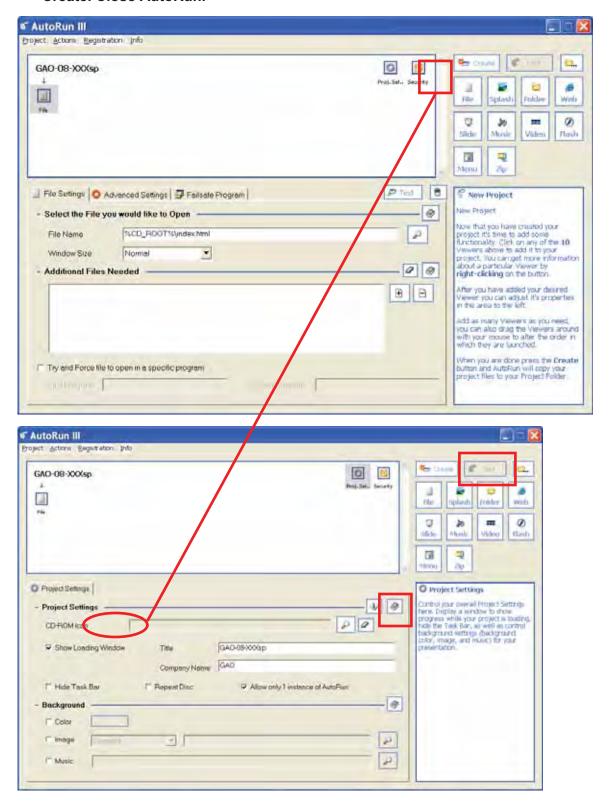
2. Fill in the CD Title (same name as the Project Name above) and Company Name (GAO is sufficient).



Select Open a File (PDF, PPS, etc) where it says "What would you like your project to do?
 Click the magnifying glass to navigate to the index.html file (which should be placed in
 the parent folder)-then click Done.

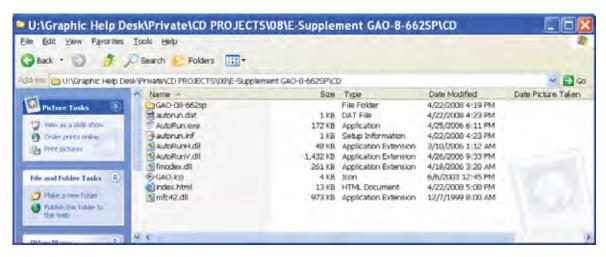


4. Check the File Name and make sure that it says %CD_ROOT&Index.html. Click on Project Setting to place the CD Icon. Click the magnifying glass next to CD-ROM Icon to navigate to and select the icon GAO.ico which should be in the parent folder. Click Create. Close AutoRun.

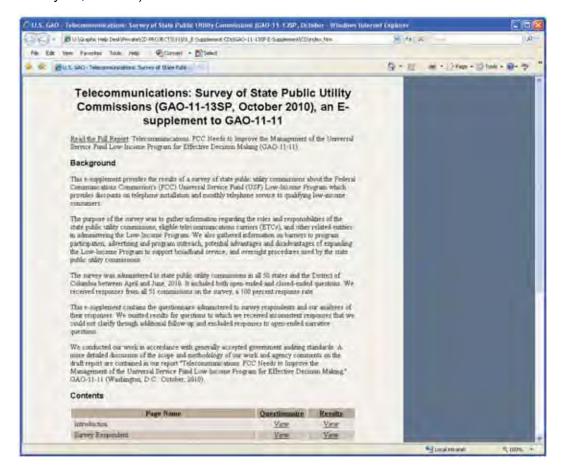


5. Open the E-Supplement folder. This is what should be listed in the parent folder. Test the

AutoRun.exe file.



6. When AutoRun.exe finishes opening, similar to what is seen below should be what loads into your IE browser window (**NOTE: below image is an updated version of the E-Supp layout; 1/03/11)



- 7. Setting up the READ ME file There is a READ ME folder in the CD folder. The file inside is a document with the information about the CD (eg copyright notice, whether the CD is LOUO, FOUO etc). Make any changes to the word document and save a PDF to the folder on the CD.
- Set up the Label in SureThing and then proceed to the PTPublisher Bravo II to burn the

CDs.

5.19 CD Procedure: PDF Too Large for E-Dissemination

If assigned a ticket similar to "File(s) exceeding maximum allowable size for mailing were just added to the WebPosting/Reports directory on GAOPUB1," try optimizing the files per the standard optimization procedure. If you are unsuccessful in shrinking the file to AT LEAST 6.7MB, then you need to call Distribution to find out if the file will be distributed to the Hill. If the file is being distributed, it needs to be burned to a CD.

(**NOTE: Not all PDFs that are too large for e-mail will actually be E-disseminated.) **These CDs will not require a splash page, only the content (PDF) and a label.** In order for same day delivery, Courier requests must be made by 9 a.m. for the morning run and by 1 p.m. for the afternoon run. Requests for courier services after 3 p.m. must be submitted by 4 p.m. Hill recipients must be available to sign for deliveries. For requests made after 4 p.m., courier service will be provided on the next business day. For more information please refer to

http://intranet.gao.gov/services/facility_services/building_services/courier_services

5.19.1 When it is determined that a CD needs to be generated for a large PDF:

- 1. CC everyone (In all cases, include InfoMgmt, Distribution, Team Contact, CA and PAG Manger in communications) on the message stating that the file size could not be decreased below 6.7MB, and that a CD is recommended for Congressional Requester.
- 2. The 312CD form has been revised to accommodate this new procedure. To help you or the contact person to fill out the 312CD form you will need to include in the email (Quantity requested, Contact name, Date, GAO Report # and Restriction statements). At this time, determine if Distribution or the Team will deliver the CDs to the requester(s).
- When you have completed or received the completed 312CD form, you can begin to process the request.

5.19.2 Preparing the CDs:

- Open the label (PDF too large_ST5_Label.std) in Surething 5 located in U:\Graphic Help Desk\Private\CD PROJECTS\C3_CD Templates\Label_Templates-Ready made labels\Ready Made Labels\PDF Too Large Labels
- 2. Type in the Title/Subtitle, GAO#, Month/Year and Restriction Statement if applicable.
 - Have a PTS team member check the label for spelling errors, etc.
 - Labels will still need approval from Contact name (indicated on the Form312CD) before the print process can begin. You can find instructions on setting up a label proof on page 19.
- 3. To burn the content onto the CD.
- 4. Email or call the Contact name (indicated on the 312CD form) ((cc)) InfoMgmt, Distribution, Team Contact, CA and PAG Manger in communications) upon CDs completion.
- 5. Deliver them to Distribution or have the Team pick them up.

6 Image Database

NOTE: GAO plans to phase out the image database in favor of several stand-alone pcs with the images organized by collection and topically in folders.

6.1 Update Image Database

After logging into phpMyAdmin, you should see a dropdown box on the left of the page under "Database". Click on the dropdown and select the appropriate database. If you have no databases in the list you may be able to create one through phpMyAdmin depending on your user privileges. After selecting a database, you should now be able to see a list of tables on the left menu as well as in the main window.

Before importing any data you need to set up your Excel spreadsheet(s) appropriately. Each Excel spreadsheet should correspond to a table in your database. In your Excel spreadsheet(s), make sure you create the same number of columns as exist for the corresponding database tables and make sure the columns are in the same order as shown by the phpmyadmin interface.

Whenever you want to upload your data into the database, export / save your 3 spreadsheets using the Comma Separated Values (CSV) format. This will enable you to import the data into the database.

To import data into a database table you firstly need to click on that table's name in the phpmyadmin interface. You then need to click on "Import" at the top of the main window. This provides the interface through which you can upload data to the table you have selected.

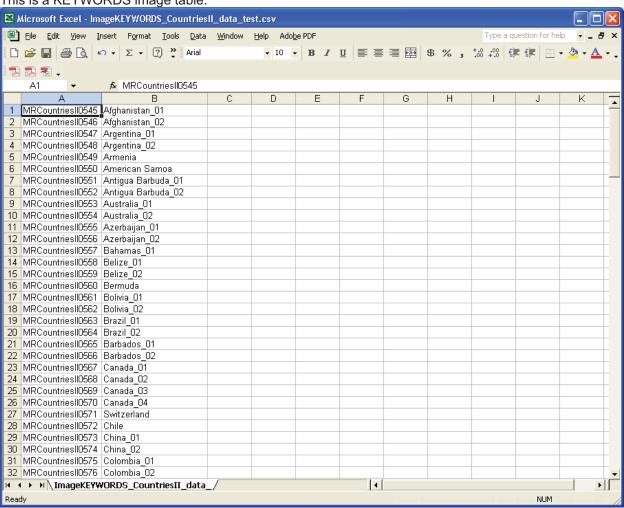
Click on "Browse..." to locate the .csv file you wish to upload. Then select "CSV" as the Format of imported file. Under CSV options, "Fields terminated by" should be changed to a comma. "Column names" can be left blank (assuming your Excel spreadsheet contained the same columns in the same order as the corresponding database table). Click on "Go" and the file will be imported.

If after trying to import a load of data you see that it has not worked as you had expected, you can delete all the records in the table and start afresh by clicking on "Empty" at the top of the main window. You can then proceed to upload an amended .csv file again.

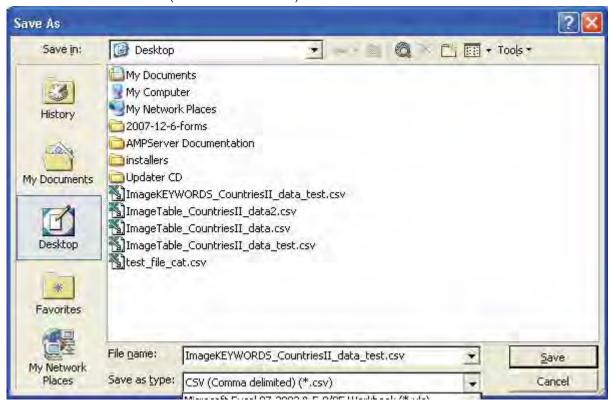
If you run into difficulties you may wish to consider our <u>MySQL Database and PHP Programming</u> services. Feel free to Request a Quote for technical assistance.

6.2 Illustrated Instructions for importing images into the GAO image database

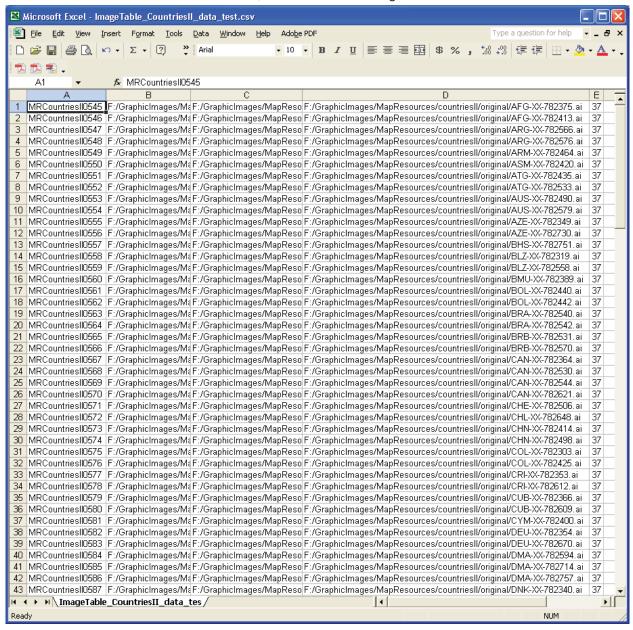
This is a KEYWORDS image table.

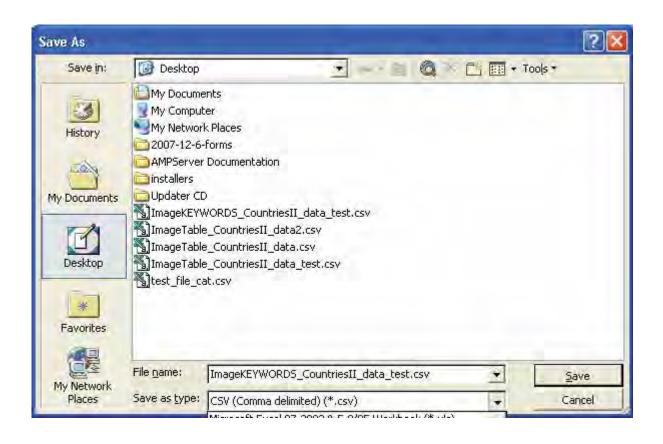


Save all excel files as CSV (not on the test tower)

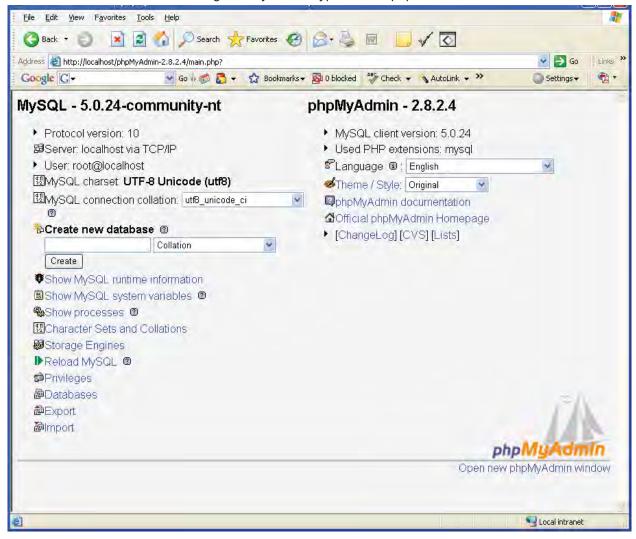


Create an IMAGE table that contains small, medium and raw image file names and locations.

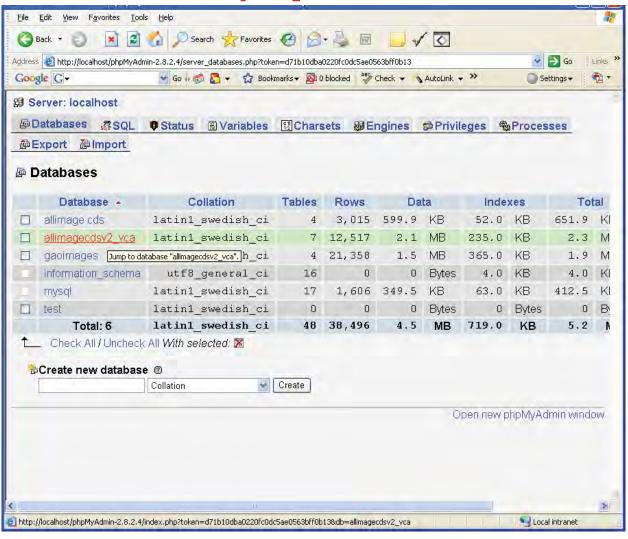




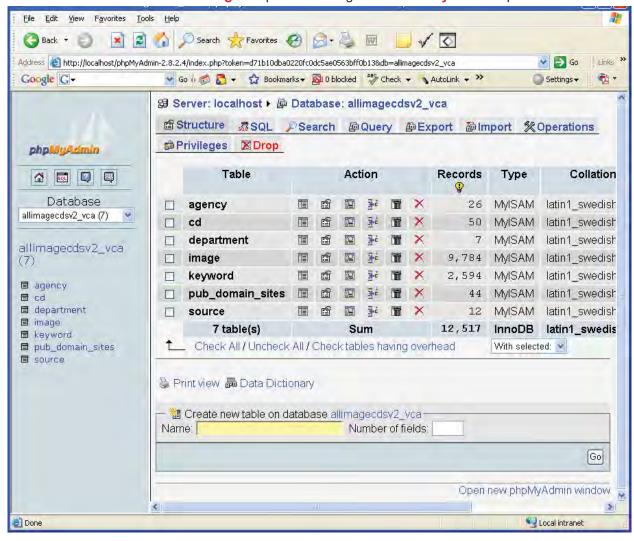
Click on F: Drive Database icon to get to MySQL.....type in main.php?



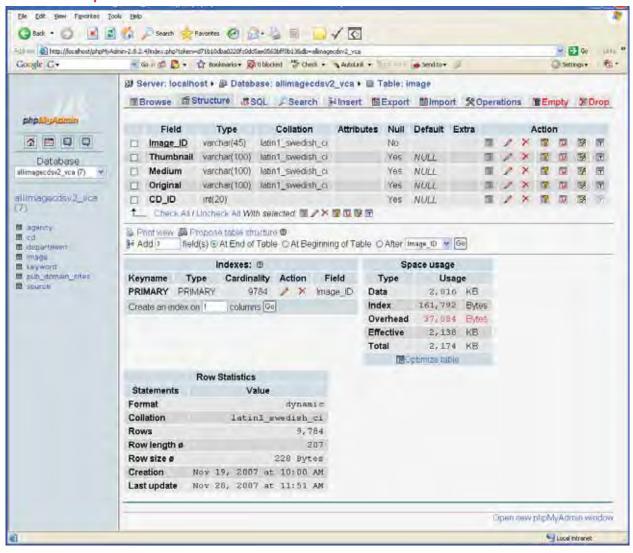
Click on Databases then Click on allimagecdsv2_vca.



Choose in the menu on the left - image to upload the images and then keyword to upload those.



Choose the **import** button.



Choose the **browse** button to locate the files to upload.

Make sure that the character set of the file is set at the default utf8.

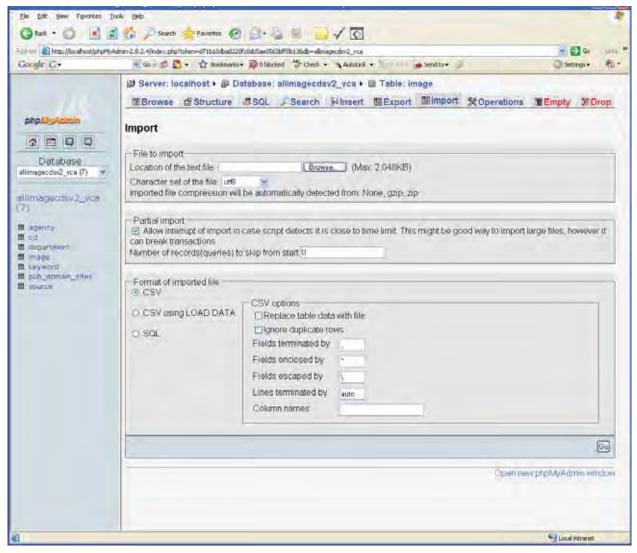
Partial Import – Check box next to Allow interrupt of import

Format of imported files

Check CSV

CVS options make sure the change the Fields terminated by to a comma,

Hit the Go button.



6.3 CHANGE PASSWORD - IMAGE DATABASE

Only for the image database computers on the 2nd and 5th floors.

- 1. Right-click on MY COMPUTER
- 2. Go to MANAGE
- 3. Click on LOCAL USERS AND GROUPS in the Left panel
- 4. Double -click on USERS in the Right panel
- 5. Right-click on user ZIPBRAVO
- 6. SET PASSWORD
- 7. Enter the old PASSWORD from DM Document #: 1873415
- 8. Create a new PASSWORD and SAVE
- 9. Make a log entrance in DM Document #: 1873415 reflecting the new password
- 10. SEND a notice to the PAG staff to let them know the PASSWORD has CHANGED

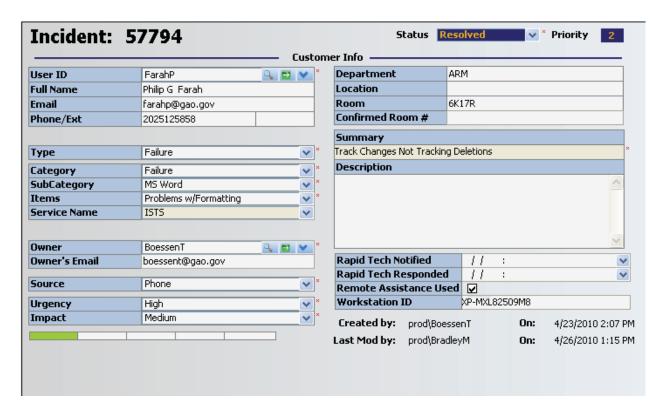
7 PTS ITSM Usage

There are two types of Incidents PTS tracks in ITSM: Failures and Requests. This section will speak to the Failures. Failures are broken down into two categories:

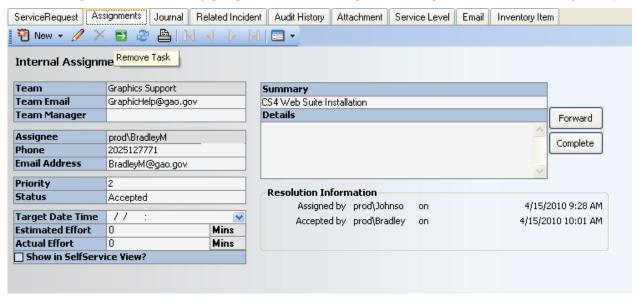
- Failure: This includes failures (such as corrupt documents, application failures, etc)
- How To: This includes questions with applications, templates, or processes.

7.1 Create an Incident (Failure)

- 1. Log in to ITSM, and go to Incident>New Incident.
 - a. Enter the customer information, Summary, Description, and Type for the Incident.
 - i. Type Failure: This is what you use if it is an incident, i.e. it does NOT fall under a request.
 - ii. Category can be either Failure or How To.
 - 1. Failures are things like Word corruption, Acrobat issues, CS4 products not saving, etc.
 - 2. How To is anything else, like requesting assistance with an Illustrator file, or if someone has a question that deals with a particular program.
 - 3. Fill in the Sub-Category with what system or hardware the ticket actually deals with (Word, Excel, Adobe Suite, Acrobat, etc).
 - 4. Items are what about the program or system is incorrect. This one may require a best guess. Examples are Problems/w formatting, problems saving files, application lock-ups, etc. Choosing the closest one is sufficient.

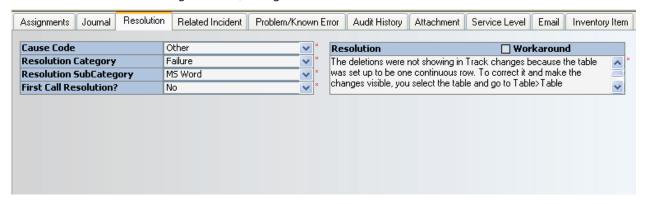


- 2. Once the Incident has been created, an assignment then needs to be made. On the bottom half of the screen, click on the "Assignments" tab:
 - a. Click New>Internal Assignment.
 - i. Team is Graphics Support
 - ii. Assignee is which team member is working the ticket.
 - iii. Summary and Details should be filled in whenever possible, as this assignment is what generates the e-mail with the description of the ticket.
 - iv. Save the assignment.
- 3. If you have been assigned the ticket, you will need to locate the Incident number and accept the assignment. You do this by going to the Ticket, clicking on the "Assignments" tab, and clicking "Accept".



7.2 Resolving an Incident (Failure)

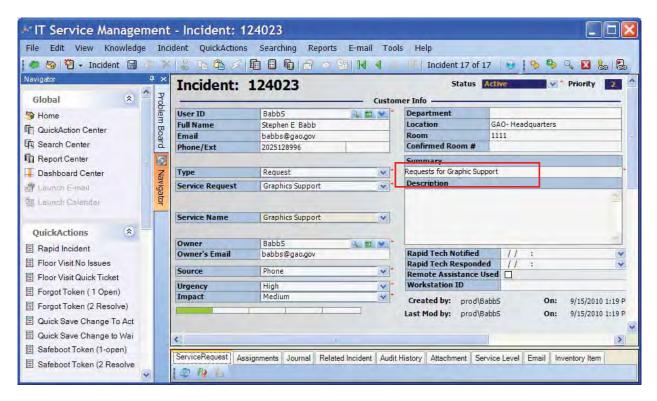
- 1. When you have completed the assignment, you are ready to Resolve the ticket. For a Failure, you need to fill in a few extra spots.
 - a. Open the Ticket and go to the "Resolution" tab.
 - Fill in Cause Code. Options include configuration, hardware, software, etc. This is where you try too say what actually caused the error. Again, best guess is sufficient.
 - ii. Resolution Category and Sub-Category are already filled in based on the initial assignment.
 - iii. First Call Resolution is either yes or no. YES if you created the ticket and solved it, NO if the ticket was forwarded from another service desk or if you had to forward it to someone else.
 - iv. Resolution description needs to be filled in. You should describe how you solved the problem, if you gave a workaround, if you corrected the error, etc.
 - b. Now, go to the "Assignments" tab and click "Completed" to indicate you have completed the assignment.
 - c. Before saving the ticket, change the "Status" to "Resolved".



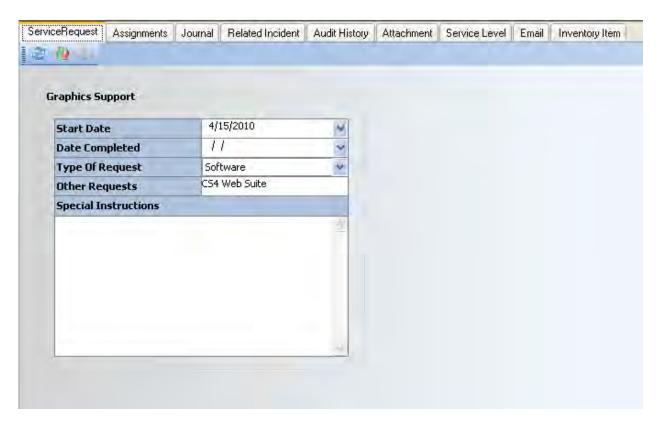
2. Once a ticket has been resolved, an email is sent to the customer asking if the issue was resolved to their satisfaction. The ticket will be moved to closed status if they reply yes or if they do not respond in 3 days. Once a ticket is closed it can not be edited.

7.3 Creating an Incident (Request)

- 1. Requests are also tracked in ITSM. There are several request areas PTS has identified to track things like Preflights, Fonts, and Images.
- 2. To create a Request:
 - a. Log in to ITSM, and go to Incident>New Incident.
 - b. Enter the customer information, Summary, Description, and Type for the Incident.
 - i. Type: Request
 - ii. Service Request should always be set to Graphics Support. Setting Graphics as the Service Request is what tells ITSM which request form to pull.
 - iii. Once you select Graphic Support as the Service Request, the Summary will automatically be filled in with "Requests for Graphic Support". Append the specific request information after this text. (e.g. if the request is a prepress for report 10-1234, the summary should say "Requests for Graphic Support Prepress 10-1234")



- c. Once you have entered "Graphics Support" as the Service Request, a form will appear at the bottom half of the screen. Fill out this form as it pertains to the ticket.
 - i. Start Date is the date you make the request.
 - ii. Date Completed is the date you finish the request.
 - iii. Type of Request is the request area. Request types are as follows:
 - 1. CD Products: for any request for CD (reprints, labels, etc)
 - 2. Fonts: any time we have to manually load Fonts
 - 3. Images: requests for image sourcing, image database, etc
 - 4. Preflight: any preflight, including graphics and reports
 - 5. Projects: long-term taskings can be placed here
 - 6. Software: any software PTS supports
 - 7. Templates: any new templates, or template changes
 - 8. Other Requests: anything that doesn't fit into one of these other categories.
 - iv. Special Instructions is there to capture any information relating to the request that is pertinent.



- 3. Once the Incident has been created, an assignment then needs to be made. On the bottom half of the screen, click on the "Assignments" tab:
 - a. Click New>Internal Assignment.
 - i. Team is Graphics Support
 - ii. Assignee is which team member is working the ticket.
 - iii. Summary and Details should be filled in whenever possible, as this assignment is what generates the e-mail with the description of the ticket.
 - iv. Save the assignment.
- 4. If you have been assigned the ticket, you will need to locate the Incident number and accept the assignment. You do this by going to the Ticket, clicking on the "Assignments" tab, and clicking "Accept".

7.4 Resolving an Incident (Request)

- 1. When you have completed the assignment, you are ready to resolve the ticket.
 - a. Open the Ticket and go to the "Service Request" tab.
 - i. Fill in the completion date.
- 2. Go to the "Assignments" tab and click "Completed" for your assignment.
- 3. Before saving the Incident, change the "Status" to "Resolved."

7.5 Ticket Status

There are 4 different Status type for tickets that you will see. They are as follows:

- <u>Active:</u> This is the most common, and the default that will appear once a ticket is created. This indicates that the incident is actively being worked on.
- Waiting: This is a choice that is used to indicate that some portion of the ticket is being waited on (i.e. you need a customer response, or manager approval)
- Resolved: This is the status we assign once our assignment is completed. This lets the system know
 that the issue has been "Resolved" and is no longer considered an open incident.
- Closed: After a ticket has been "Resolved" and the customer has been given a change to provide feedback, the ticket will be "Closed". Usually, this is two days after it is resolved. Changing the status to Closed is an automated part of the system. We should not be marking tickets as "Closed".

ITSM is built on a system of Service Level Agreements. This basically means that some users of ITSM have deadlines they need to meet for ticket turnaround. While PTS does NOT have to obey these time constraints, the system will still flag your tickets if they are not completed TWO DAYS from the assignment date. To prevent this from happening:

- When you are assigned a ticket, or if you are creating a ticket, change the status to "Waiting" if it is something you know you will not be working on that day.
- Change the status to "Waiting" if you e-mailed the customer and are waiting for a response
- A scheduled install date, waiting for software, etc are also reasons to place tickets in "Waiting"

Note: **DO NOT** place the ticket in "Waiting" if you are actively working on solving the issue. Also, tickets that have not been responded to should not be placed in "Waiting."

This will help up avoid having our assignments turn red in the queue, and will also keep us from getting Escalation e-mails for tickets that are aging. Changing the status to "Waiting" will allow our older incidents to be exempt from the SLA requirements.

7.6 ITSM Ticket Assignment Rotation

PTS rotates being the "ITSM Lead", or person who is responsible for assigning the tickets as they come in. Each employee will take a different day, and trade off the responsibility. The following duties will be done by each employee when it is their day to be the "ITSM Lead":

- Checking the GraphicHelp e-mails for new assignments.
- Forwarding assignments created by the Help Desk to a staff member.
- Creating new assignments as necessary and forwarding to a staff member.
- Ensuring that all tickets have the correct Status.
- Following up with staff on their assigned tickets.

7.7 Ticket Assignment

Assignments will be given out based on the order listed below. Since all PTS staff are cross-trained, the subject matter of the ticket does not matter. (The order of staff is by level of experience on the team).

The ITSM Lead will try to keep the number of assignments as even as possible. All staff are encouraged and expected to take tickets that may be outside their normal work.

To give an assignment to a Staff Member:

- 1. Check the GraphicHelp e-mails. Create tickets as necessary, or check tickets forwarded from HelpDesk or other sources.
- 2. Assign tickets by the order listed above.
- Go to the Assignment tab, and change the "Assignee" drop down to the staff member you are assigning it to.
- 4. E-mail or tell them they have been given a ticket, and supply them with the ticket number.

Note: PTS does receive walk-in questions that will require a ticket to be generated. The ITSM Lead will create this ticket the same as they would for a problem that was e-mailed. These are also assigned in the same way. They can be given to the next person on the list, or they can be assigned to whom the request was made.

7.8 Schedule:

The schedule for ITSM Lead is posted on a Whiteboard in the office. It is updated every month, using the Outlook Calendar to determine days off, etc. Reminder appointments are also sent out electronically using Outlook to remind staff when it is their assigned day.

7.9 Ticket Management

Sometimes, we will run across situations where we can't solve the problem entirely on our own. In those instances we should be generating multiple assignments for the ticket. For example, you begin working on a document corruption issue, but you need someone else to take a look at it. Simply create a new Internal Assignment for another staff member, and pass it along.

- Creating multiple assignments allows us to avoid duplication. It also allows us to avoid duplication of tickets in the system.
- Creating a new Internal Assignment can be done by the ITSM Lead, or whomever the ticket is assigned to.

8 Common Help Desk Issues

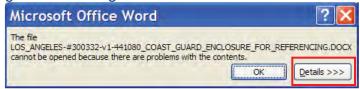
Certain help desk calls, tracked in ITSM, are common and require the same solutions. This section will detail certain common help desk issues and how to solve them.

8.1 MS Word Issues:

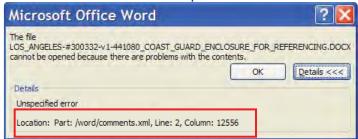
Paste as Link corruption in comments for DM dos with tracked changes on (OLE)

8.1.1 Fix for Specific Word Corruption due to OLE Links in Comments (Using UltraEdit)

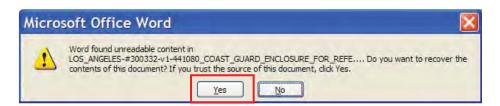
If you get a ticket for a corrupted Word document and upon opening the document you get this message. Click on the details button.

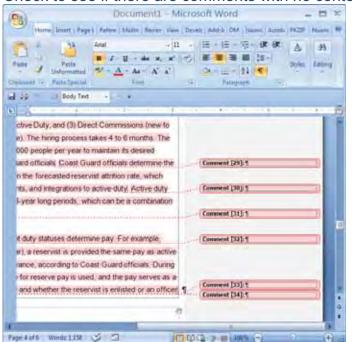


If the details specifies "Unspecified Error" and the location of the problem is in the comments.xml file with a specific reference to a column.



Continue and open the document and respond YES when asked to allow Word to recover the document contents.



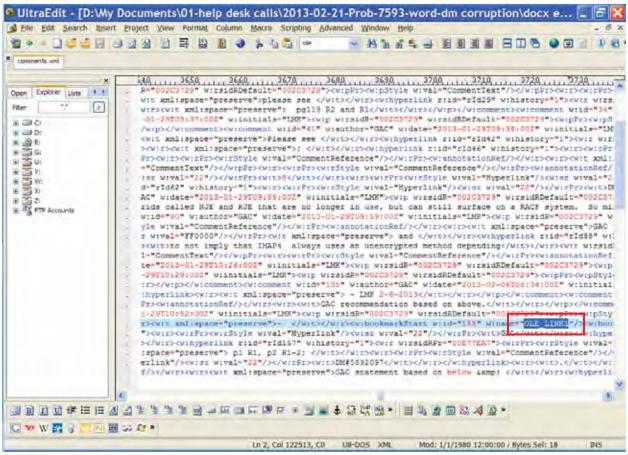


Check to see if there are comments with no content or author information.

If your corrupted document matches this profile, I believe we can repair the file by editing the comments.xml file referenced in the error message.

8.1.1.1 To correct this problem:

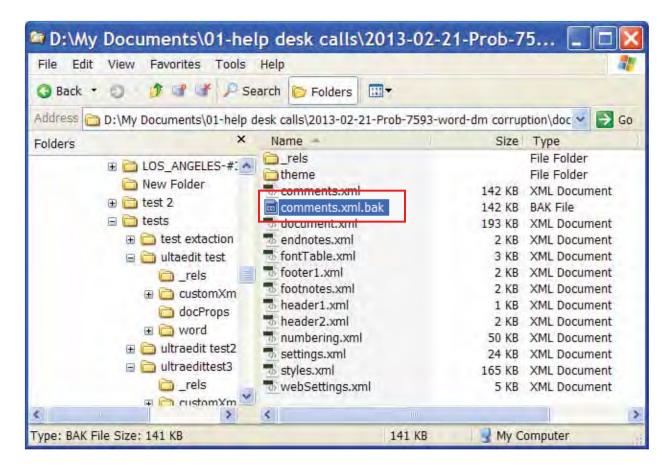
- 1. Make a copy of the word document and change the extension of the document from .docx to .zip.
- 2. Open the .zip file up in PK Zip.
- 3. Extract all the files to a folder in you're my documents folder.
- 4. Go into the Word folder that gets created and look for the comments.xml file
- 5. Once you find the comments.xml file you will need to open it up in UltraEdit.
- 6. Once you open the comments.xml file, use the Search->Find functionality to search for "OLE".
- 7. If you find a reference to OLE it should say "OLE Link1".



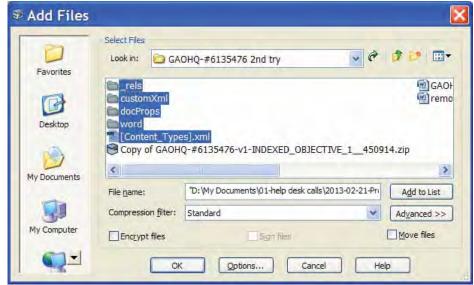
- 8. Now you will need to carefully select the entire bookmark tag.
- 9. The tag reads: <w:bookmarkStart w:id="155" w:name="OLE_LINK1"/>
- 10. Make sure to include the opening "<" and closing "/>" tags and not to include any other tagging.
- 11. Delete the selected bookmark.
- 12. Search for other OLE references and delete them if you find any.
- 13. When there are no further OLE references, save the comments.xml document.
- 14. Please note, you will need to delete a backup file that ultraedit saves in your current folder before rezipping the file.
- 15. Browse to your Word folder

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16. Delete the comments.xml.bak file.



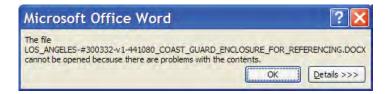
- 17. Now you will need to rezip all the files you unzipped.
- 18. Open PK Zip.
- 19. Click the Add Files icon. Select Add Files.
- 20. Browse to where you unzipped the files.
- 21. Highlight the "Content_Types".xml file and all the folders



- 22. Click OK to zip them up.
- 23. In the next dialog, name the file and click Save.
- 24. Browse to where you saved the zip file.

- 25. Change the extension of the file from .zip to .docx
- 26. Open the .docx file and verify that no error message occurs and all the comments are present.

NOTE: There are other types of corruption problems that will give you a "...cannot be opened because there are problems with the contents." Message.



Going to the details, can help you pinpoint these problems and you can use an xml editor to go to that location and check for errors that might be causing the problem. A common error are missing end tags which can be found by doing a validation check of the document. If there are errors they will be listed and a good xml editor will take you to them and help pinpoint what needs to be corrected.

8.1.1.2 Steps to Reproduce Error

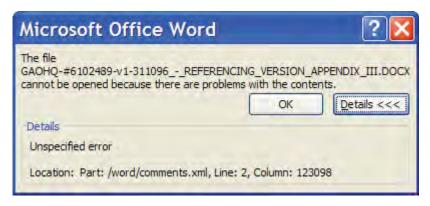
The problem occurs when the **paste special->paste as link** functionality in Word is used when documents are in DM and Tracked Changes is ON.

When you paste content as a link, ole links (or bookmarks) get created in both the source document and the destination document.

I have found that in Word 2007 documents when you copy text in a comment and paste as a link into another 2007 document (I've been pasting as a link and accepting the default html format), the **source document** (where you copied from) gets corrupted after you close and then attempt to reopen the document. Generally I've been copying from comments and pasting into other comments.

8.1.1.3 Alert to Help Desk Staff

Whenever they receive a MS Word document which prompts them with a message informing them that the document cannot be opened because there are problems with the contents, they should stop and create a copy of the document (from Windows Explorer) before proceeding to have MS Word attempt to recover the document.





Once they say yes at this second prompt, MS Word will attempt to recover the document (similar to an open and repair) and will strip out the corrupted elements in the document.

For this specific corruption problem caused by the OLE links in comments, this means that all comments after the corrupted comment will also be stripped out.

8.1.1.4 Bottom Line: Save copy of corrupted file

So Help Desk Staff should always save a copy of the corrupted document with the ticket before attempting to repair or have MS Word recover the document.

8.1.2 Corrupt Char-Char Styles

- Corrupt Char-Char Styles: Char-Char styles are duplicate paragraph styles Word creates that link to the actual paragraph style. These generally pop up when paragraphs are formatted in pieces, and the style splits and attaches itself to a built-in style. The Char issue becomes worse when a corrupt style exists within a document, and is copied/pasted into other documents. PTS has developed several steps for removing these from a document:
 - o Delete the Char using the Styles and Formatting Menu
 - Open "Styles and Formatting" pane (Format>Styles and Formatting)
 - At the bottom of the "Styles and Formatting" pane, click the drop-down menu under "Show" and select "Custom"
 - Click the "Styles" button at the bottom left-hand side of the dialog
 - In the dialog that opens, scroll to the top of the style list and identify any styles that start with the word "char".
 - Starting with the last one (if multiple are present), highlight the char style and click "Delete"
 - Repeat for each char style present in the list, working from the last backwards
 - Click "Apply"
 - Once finished, save your document
 - o Delete the Char using the Organizer
 - Go to the "Tools" menu and select "Templates and Add-Ins"
 - Click the "Organizer" button at the bottom left-hand side of the dialogue.
 - Select the first Char style from the LEFT Hand pane, and click "Delete"
 - Repeat for each subsequent char style.
 - Delete the Char using a Macro
 - Open "Styles and Formatting" pane (Format

 Styles and Formatting)
 - At the bottom of the "Styles and Formatting" pane, click the drop-down menu under "Show" and select "Custom"
 - Click the "Styles" button at the bottom left-hand side of the dialog
 - In the dialog that opens, see if any of the char styles are still present
 - If so, click on the remaining style, then highlight the entire name of that style and copy it.
 - Click the "Cancel" button to go back to the first style screen
 - Click the checkbox next to the style name so it will appear in the "Styles and Formatting" list
 - Click "Apply" to close the dialog.
 - You can then paste the name between the parentheses below, where it says "PASTE EXACT NAME OF CHAR STYLE":

Sub DeleteChar ()

Dim styl as Word.Styl, doc As Word.Document

Set doc = ActiveDocument

Set styl = doc.Styles.Add(Name:="replaced")

On Error Resume Next

Doc.Styles("PASTE EXACT NAME OF CHAR STYLE") .LinkStyle = styl Styl.Delete

End Sub

- Go back to your document containing the char style.
- In the "Styles and Formatting" pane, right-click on the char style and select "Delete"
- IMPORTANT: click on the document content and away from the "Styles and Formatting" pane, or the style will not be deleted
- Go to the "Tools" menu, then "Macro", then "Visual Basic Editor".
- In the "Project" pane on the left, open "Microsoft Word Objects" and double-click "ThisDocument" under the Project you are working in. (the name of your document will show next to the Project).
- Paste the code you copied.

- Click the "Run" button in the Visual Basic editor. (the run button looks like a play button)
- Close the Visual Basic Editor.
- Save your document.
- Reopen and verify the char style at the top of the list is gone by going to "Styles and Formatting" – "Show" – "Custom" and making sure it is gone from the list of styles.

8.1.3 Tables

• **Tables:** Due to the nature of tables, their formatting and settings can often cause issues with the document as a whole.

o Row Properties

- The row properties of a table can cause comments, track changes, and text to disappear. If there is an issue with the table, select the entire table, right-click, and select "Table Properties"
- Under the "Table Properties" menu, select the "Row" Tab
- Un-check "Allow Row to Break Across Pages"
- If there are lots of long rows, suggest the customer break them up into indiviual rows to help with the stability of the data.

Text Wrapping Properties

- Tables often have text wrapping set. A combination of "Allow Row to Break Across Pages" and having the text formatting set to "Around" can cause issues within the table.
- Select the table, right-click, and go to "Table Properties".
- On the "Table" tab, select "None" from the text wrapping section.

Nested Tables

- Nested tables are smaller tables within larger tables. For stability purposes it is not recommended these be used.
- If a nested table is present and needs to be removed, click in the table that is nested.
- Go to the "Table" menu, and click "Select", then "Table"
- Go to the "Edit" menu and select "Cut"
- Place the cursor outside of the remaining table.
- Go to the "Edit" menu and select "Paste"
- Return to the original table.
- Reformat the table to accommodate for the additional columns and rows.
- Copy each cell fo the table you pasted, and paste the contents into the new columns/rows where appropriate.
- Reformat the table to that it duplicated the original formatting.

8.1.4 Footnotes

• **Footnotes:** Footnotes are specific numbered references, and can sometimes cause corruption when not used properly.

o Footnote Troubleshooting

- When deleting a footnote, always highlight and delete the FOOTNOTE marker within the body text rather than just deleting the footnote text from the bottom of the page. Deleting text from the bottom of the page erases the marker, but does not remove it from the underlying structure of the document. This can cause errrors with the numbering because Word will still count a footnote until that marker is removed.
- PTS has a special Footnote toolbar that can help troubles-shooting footnotes, such as counting them, deleting them, selecting specific footnotes, and reinserting them as unformatted text.

o Removing a particular Footnote:

Scroll through the document page by page and check the footnote numbering.

- If any of the footnotes skip a number chronologically, this is the problematic footnote.
- Often if the number is incorrect, simply accepting all tracked changes will resolve this.
- If accepting the changes does not solve the issue, go to the "Edit" menu and select "Go to"
- In the dialog that appears, highlight "Footnotes" in the list
- In the "Enter footnote number" entry box, type the number of the footnote that was missing.
- Click "Next"
- Close the "Go to" dialog box.
- Clikc the "Delete" key to remove the problematic footnote.

8.1.5 General Formatting

- General Formatting: Certain formatting capabilities and features in Word have been disabled to prevent corruption. When these problematic formats and features are used they can cause corruption.
 - Ad-Hoc Formatting:
 - Ad-hoc formatting, i.e. formatting done NOT using character and paragraph styles can sometimes lead to corruption. It is recommended that styles be applied through the Styles and Formatting window (Format>Styles and Formatting)
 - If ad-hoc formatting has caused corruption, select the text and go to Format>Styles and Formatting. On the Formatting pane, select "Clear Formatting" to clear the formatting and revert back to default text.
 - Copy/Paste Text: It is recommended that all information copied from another document be inserted as Unformatted Text (Edit>Paste Special>Unformatted text). This can prevent corruption from carrying over between documents.
 - Insert Page Numbers:
 - This option has been disabled by a corruption prevention button called "Update Settings", created and distributed by the PTS team. Even so, as a general rule you should use the page number feature within the Header/Footer option on the "View" menu.
 - Track Changes/Comments:
 - Whenever possible, you should accept or reject your track changes, and delete all comeents as excessive use can cause corruption.
 - Master Documents:
 - Avoid use of this feature as it may cause corruption.
 - Versions:
 - Avoid use of the this feature as it may cause corruption. This does not apply to versions stored in DM.
 - Document Map:
 - Avoid use of this feature as it may cause corruption. You can use Outline View as a safe alternative.

8.2 Adobe PDF Issues:

8.2.1 Corruption

Corruption: General PDF corruption (for example, if the PDF won't open) is often a cause of being downloaded incorrectly. PDF corruption usually occurrs in the delivery method. It is recommended that the customer recreate the PDF if they made it, or get a new copy from the person who sent it to them. Also suggest they do not try to open the attachement in their e-mail, but save it to ther desktop first and open from there. If these methods do not solive the problem,

please try the steps belwo the reslove the issue with printing, opening and receiving error messages in PDFs.

- o Open and Save PDF in FoxIt
 - Open FoxIt
 - Go to File->Open and browse to corrupt PDF, select and Open the file
 - Use the highlighting tool under Comments->Highlight text, to highlight some of the text
 - Go to File->Save as to save the document.
 - Select and delete the highlighted comment you just added.
 - Save your document.
 - Open in Acrobat to see if corruption was fixed enough to open successfully in Acrobat.

PDF from Blank Page:

- Open Adobe Acrobat.
- Go to File>Create PDF>From Blank Page.
- Open the corrupt PDF.
- Drag contents of corrupt PDF into blank PDF.
- Save the file.
- Try to open the newly created file.

Create PDFs by printing file (print to PDF, print to distiller):

- Open the corrupt PDF in Acrobat.
- Go to File>Print.
- Select "Adobe PDF" as the printer.
- Browse to the location you wish to save.
- Save the file
- Older software may not be capable of handling the features of the latest PDF versions.

Export to Postscript:

- Open the corrupt PDF in Acrobat.
- Go to File>Export>Postscript>Postscript.
- Browse to the location you wish to export to.
- Click Save.
- Open the .ps file that was just created.
- Give Distiller a moment to convert the file automatically to PDF.
- In the Distiller dialogue under PDF, double-click the name of the file to open it.
- Resave.

o Insert File in Acrobat:

- Open Adobe Acrobat.
- Go to File>Create PDF>From Blank Page.
- Open the Pages Palette.
- Right-click on the blank page.
- Select "Insert Pages."
- Browse and select the corrupt PDF.
- If it inserts without error, save the file.
- If you receive an error message, and it does not open, proceed to the next section.

Open in Illustrator:

- Open Adobe Illustrator.
- Create a new letter size document.
- Go to the File>Open.
- Browse to the PDF and select it.
- If the PDF is more than one page you will have overflow text.
- Click on the overflow button to copy the text.
- Create a new letter size Illustrator file.
- Click on the newe page to place the overflow text.
- Save the page as an individual PDF.
- Repeat steps 6 through 10 until there is n more overflow text.

- Combine all PDFs.
- Open in Word:
 - Open MS Word.
 - Go to File>Open.
 - Under "File Type" select "Recover Text from Any File."
 - Select the corrupt PDF.

8.2.2 Fonts

- **Fonts:** Fonts should be embedded in the PDF at all times. Missing fonts can cause text to display and print incorrectly.
 - Embed Missing Fonts:
 - In Acrobat, choose Tools>Advanced Editing>Touch Up Text Tool.
 - Clike the text containing the font embedding or subsetting to edit. A paragraph of text is enclosed in a bounding box. You can select text within the paragraph by dragging.
 - Right-click the text, and choose Properties.
 - In the Touch Up Properties dialog box, click the Text tab to display the font name and font properties as well as embedding and subset capabilities.
 - To see a list of all fonts, scroll through the Font menu. Document fonts are listed first. Your system fronts are listed below the document fonts.
 - Choose a don't from the Font menu, check the permissions to determine which
 options are available for that font, and then select an embedding option.

8.2.3 PDF Maker

- PDF Maker: Converting to a PDF from a source program is based off of settings that, if incorrect, can cause the document to fail in the conversion process. Due to tagging and accessibility, it is always recommended that a PDF be created by the PDF Maker instead of printing to PDF. The Adobe PDF Conversion Settings should be as follows:
 - Settings Tab:
 - Conversion settings should be set to Standard.
 - View Adobe PDF result: checked
 - Prompt for Adobe PDF file name: checked
 - Convert Document Information: checked
 - Create PDF/A-1a: 2005 compliant file: unchecked.
 - Attach source file to Adobe PDF: unchecked
 - Add Bookmarks to Adobe PDF: checked
 - Add Links to Adobe PDF: checked
 - Enable Accessibility and Reflow with tagged Adobe PDF: checked
 - Security Tab:
 - Require a password to open the document: unchecked
 - Restrict editing and printing of the document: unchecked
 - O Word Tab:
 - Convert displayed comments to notes in Adobe PDF: checked
 - Convert cross-references and table of contents to links: checked
 - Enable advanced tagging: checked
 - Bookmarks Tab:
 - Convert Word Heading to Bookmarks: checked
 - Convert Word Styles to Bookmarks: unchecked (when styles are checked this will automatically select)
 - Convert Word Bookmarks: unchecked
 - Style levels on Bookmarks Tab:
 - Heading 1: level 1
 - Heading 2: level 2
 - Heading 3: level 3
 - Heading 4: level 4

Contents: level 2Report Title: level 1Report Subtitle: level 1

Title: level 2

9 PTS Informal Peer Review Process

PTS has instituted an Informal Peer Review process, which incorporates SRA's procedures for peer review. All PTS documents are put through the Peer Review process, before they are considered complete.

9.1 Coordinate Peer Review

All PTS Staff must corrdinate Peer Reviews through the Peer Review Lead. The Peer Review Lead fills out the coversheet, and e-mails the participants. Based on the size of the document to be reviewed, the Peer Review Lead will determine how long the peer review will last.

9.2 Complete Peer Review

- The Peer Review Coordinator will send e-mails including the coversheet and the document for peer review. A due date will be provided, as well as instructions on how to review the document.
- PTS team members will peer review the document, and using either Track changes in MS Word, or a paper copy, will make their corrections and comments before the due date.
 Staff will fill out their portion of the coversheet with how long the review took and how many pages they reviewed.
- The Peer Review Coordinator will either work with the author to explain changes and set a deadline for incorporating, or the coordinator will make all changes to the documentation.

9.3 Track Peer Review

Once the Peer review has been completed, and all changes have been verified, the Peer Review Coordinator will save copies of the reviewed files and the cover sheet into a folder on the U:Drive that can be accessed at a later date.

10PTS Reporting Procedures

10.1 Weekly Reporting

PTS reports weekly on our accomplishments and planned activities. We also report on our ITSM tickets for the week, as well as total tickets in the queue. The status report is saved into a DM folder: GAOHQ-#3976094-PTS WEEKLY STATUS REPORTS

10.2 Monthly IPR Reporting

Based on the highlights of that month's weekly reports send 3-4 accomplishments and descriptions for that month along with 3-4 significant planned activities John Wilson. Also include any risks, recommendations or resolutions recorded that month.

11PTS Software/Hardware Management

11.1 Currently Supported Software Listing

All supported software is listed in the DM document DM #3344935.

11.2 Currently Supported Template Listing

All supported templates are listed in the DM document DM #3344935.

11.3 Currently Supported Hardware Listing

All supported hardware is listed in the DM document DM #3344935.

11.4 Software License Management

All PTS managed software licensing is tracked using a DM spreadsheet: DM #705831

Access to all Software is evaluated on an as-needed basis, and approved by John Miller. PTS is responsible for installation and support of all managed software listed in the DM Document links.

Appendix I: PTS Documentation Index